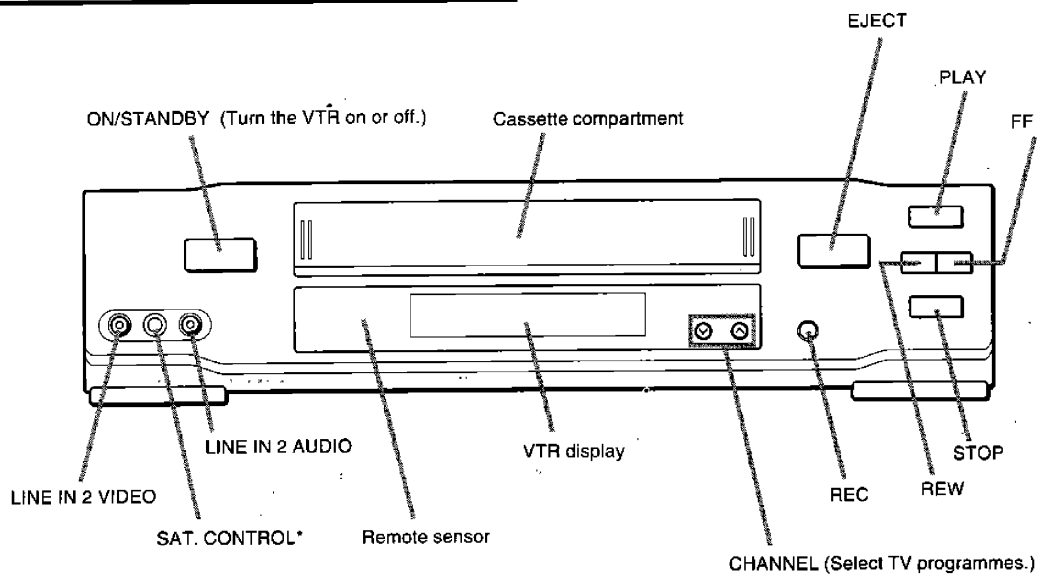# SECTION 1
GENERAL DESCRIPTIONS

OPERATING INSTRUCTIONS (V-204B)
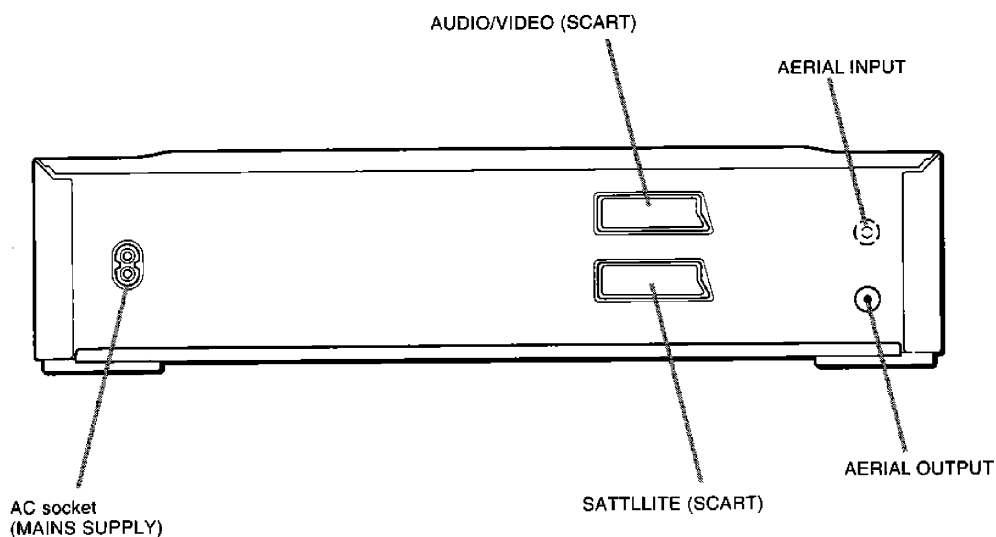
1 IDENTIFICATION OF CONTROLS

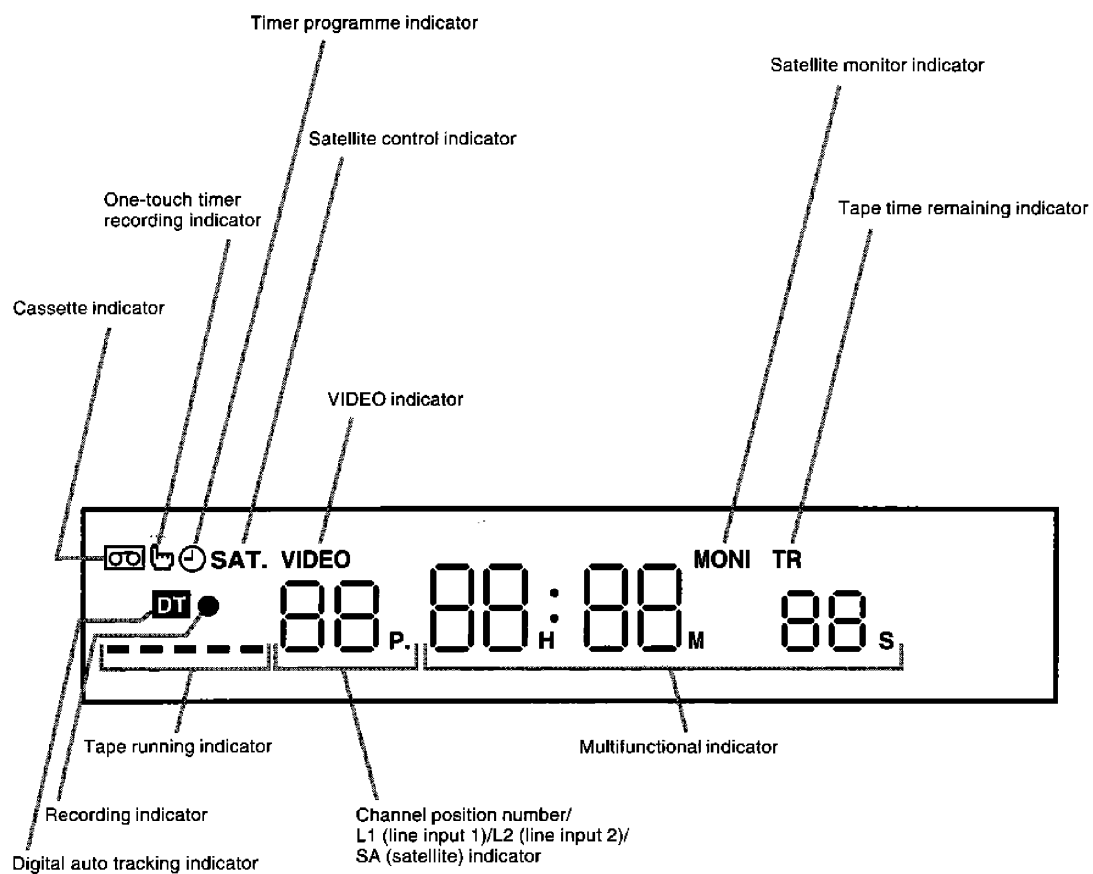### Front Panel

EJECT

PLAY

ON/STANDBY (Turn the VTR on or off.)   Cassette compartment   FF

LINE IN 2 AUDIO   VTR display   STOP

LINE IN 2 VIDEO   REC   REW

SAT. CONTROL*   Remote sensor

CHANNEL (Select TV programmes.)

*This jack is for a special case of satellite receiver setting. Not in general use.

Rear Panel

AUDIO/VIDEO (SCART)

AERIAL INPUT

AERIAL OUTPUT

AC socket
(MAINS SUPPLY)   SATTLLITE (SCART)

VTR Display

Timer programme indicator

Satellite monitor indicator

Satellite control indicator

One-touch timer
recording indicator

Tape time remaining indicator

Cassette indicator

VIDEO indicator

```
[oo] ᠍⊕ SAT.  VIDEO                              MONI  TR
 DT ●                                     
         ——————  88 P.  88:H 88 M          88 S
```

Tape running indicator

Multifunctional indicator

Recording indicator

Channel position number/
L1 (line input 1)/L2 (line input 2)/
SA (satellite) indicator

Digital auto tracking indicator

Remote Controller

TV/VIDEO

INPUT SELECT

(1 – 0)

DISPLAY

INDEX

REC

SLOW

REW

T. SEARCH

SAT. MONI.

ON/STANDBY

COUNTER RESET

COUNT/TR

CH/TRK

ENTER

SHIFT

OSP

CANCEL

TIMER

PAUSE/STILL

PLAY

FF

STOP

SAT. CONT.

VIDEO PLUS+
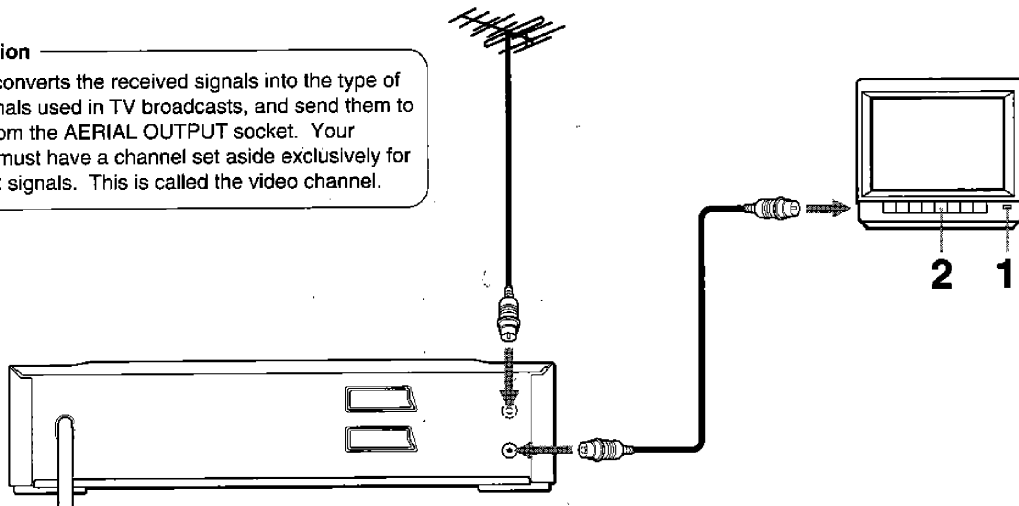
2 HOW TO ALLOCATE A TV CHANNEL TO THE VIDEO CHANNEL

To watch or record video pictures when your TV and VTR are connected only by aerial, you need to tune your VTR into a TV channel (eg. 5).

Important

The following adjustment is necessary when the VTR is connected to the TV via the AERIAL OUTPUT socket only.

Information

The VTR converts the received signals into the type of output signals used in TV broadcasts, and send them to your TV from the AERIAL OUTPUT socket. Your television must have a channel set aside exclusively for these VTR signals. This is called the video channel.

---

1 Turn on the TV.

2 Select a free station on the TV which you wish to use for your video picture, for example station 5.
This station 5 will be only used for watching a video picture.

3 Press the **ON/STANDBY** button to turn on the VTR.

ON/STANDBY

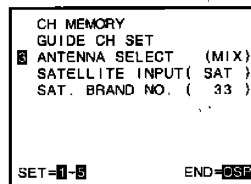**4** Hold down the OSP button **for more than 5 seconds.**

VTR display

OSP   VIDEO   `60 ch`

5 Tune the TV (on station 5 for example in step 2) so that the following screen is shown clearly.
(For tuning the TV, refer to the TV's manual.)

TV screen

```
CH MEMORY
GUIDE CH SET
ANTENNA SELECT     (MIX)
SATELLITE INPUT( SAT )
SAT. BRAND NO. ( 33 )

SET=1-5          END=OSP
```

If after tuning (in step 5), you still have some interference because of neighbouring broadcast channels, press the **SHIFT** button to select another video channel eg. between channels 53 and 67.
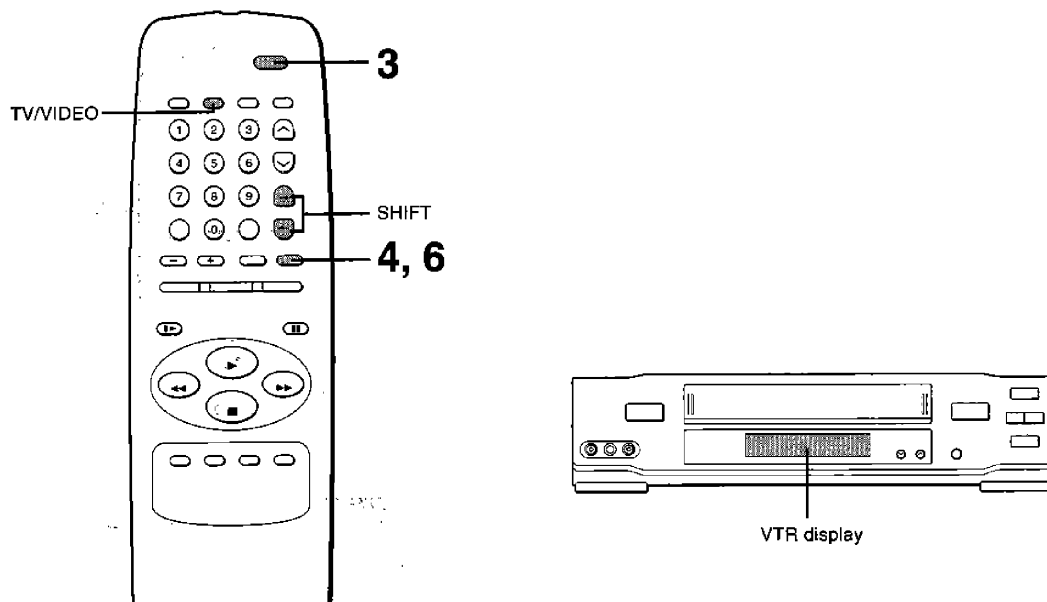
SHIFT   VIDEO   `62 ch`

Re-tune the TV to around UHF channel 62 (for example), and confirm the screen is displayed clearly.

6 Press the **OSP** button.
Video channel setting is complete.
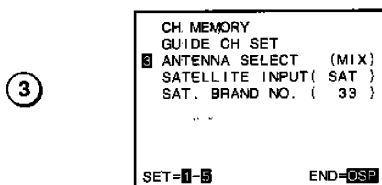
TV/VIDEO

3

SHIFT

4, 6

VTR display

Note on the Antenna Output

On the screen in step 5, the antenna output can be set to "MIX" or "SW".
(Applied only when the VTR is connected to your TV only via the AERIAL OUTPUT socket.)

Press **number button 3** to set "MIX" or "SW".

③

```
CH. MEMORY
GUIDE CH SET
█ ANTENNA SELECT    (MIX)
SATELLITE INPUT( SAT )
SAT. BRAND NO. ( 33 )


SET=█-█          END=OSP
```

MIX: You can watch a video picture on the video channel regardless of whether or not you have pressed the TV/VIDEO button.
The switch should only be set to "SW" if the video picture on TV pictures cannot be obtained clearly.

SW: You can watch a video picture on the video channel only when the "VIDEO" indicator is lit in the VTR display by pressing the TV/VIDEO button.
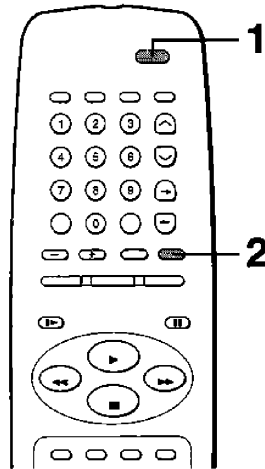
1-5

2 MENU/SETUP SCREEN

You can set desired functions on the TV screen.

Preparation

- Confirm the TV is on and set it to the video input mode, or select the video channel if you made the aerial connection for the TV and the VTR.
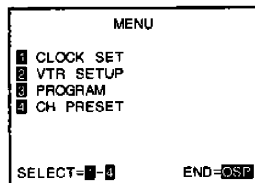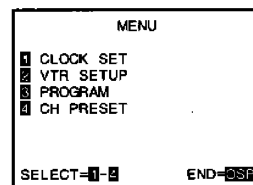

MENU Screen

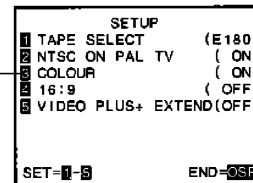**1** Press the **ON/STANDBY** button to turn the VTR on.

ON/STANDBY

2 Press the **OSP** button.
The MENU screen appears.

OSP

```
                MENU

    ■ CLOCK  SET
    ■ VTR  SETUP
    ■ PROGRAM
    ■ CH  PRESET


    SELECT=■-■      END=OSP
```

SETUP Screen

```
                MENU

    ■ CLOCK  SET
    ■ VTR  SETUP
    ■ PROGRAM
    ■ CH  PRESET


    SELECT=■-■      END=OSP
```

Press **number button 2**.
The SETUP screen will appear on the TV.

```
                SETUP
    ■ TAPE  SELECT      (E180)
    ■ NTSC  ON  PAL  TV  ( ON)
    ■ COLOUR            ( ON)
    ■ 16:9              ( OFF)
    ■ VIDEO  PLUS+  EXTEND(OFF)



    SET=■-■          END=OSP
```

If the TV programme or the tape is monochrome, press **number button 3** to set to "OFF".

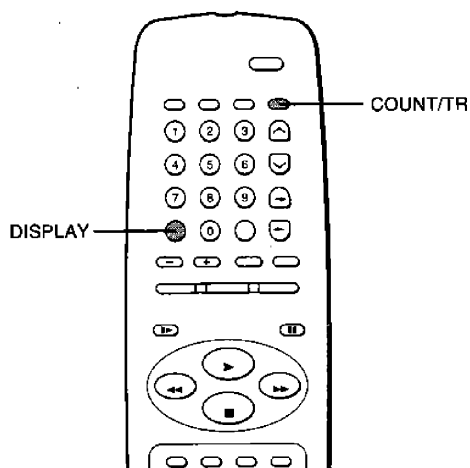# 2 ON SCREEN DISPLAY

The VTR tells you current operating modes on the TV screen.

Information

- When you press the DISPLAY button, the VTR displays the current operating mode on the TV screen.
- In addition to the indication shown below, the VTR may display other indications such as index search. See respective pages for each explanation.
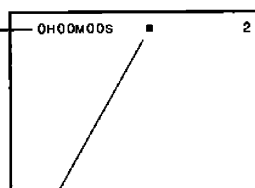
COUNT/TR

DISPLAY

Pressing the **DISPLAY** button makes the operating mode appear. If you press this button again, the indication goes off, leaving the counter indication (counter, tape remaining, clock) on the screen. To turn it off, press the **DISPLAY** button once more.

Counter indication
- Linear time counter
- Tape time remaining
- Clock

Each time the **COUNT/TR** button is pressed, the indication changes.

0H00M00S   ■   2

Channel position number

The indicator varies with the operating mode.

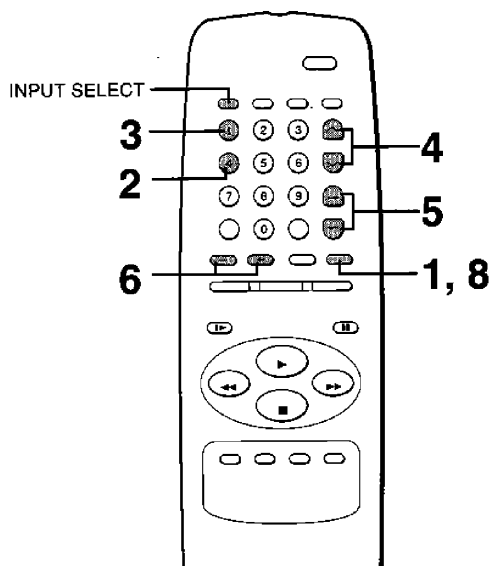|	
Ejecting a tape	▲
Stop	■
Fast-forwarding Forward picture search	►►
Rewinding Reverse picture search	◄◄
Recording	●
Recording pause	❚❚●
Playback	►
Still picture Frame advance	❚❚
Slow playback	❚►

1-7

2

HOW TO ALLOCATE TV STATIONS ON THE VTR

To watch and record TV programmes via the VTR, it is first necessary to store each TV station in the memory of the VTR.
This VTR can store up to 48 positions for TV broadcasting stations.

Information

Each TV station operating in the U.K. (eg. BBC1, ITV) broadcasts on a unique frequency, which in turn has been allocated a transmission channel number (21 - 69). However, this unique frequency and corresponding number changes for each TV station from area to area. For example, BBC1 in London uses channel number 26, while in Oxford BBC1 uses channel number 57 (i.e., CH57).
This VTR will indicate these channel numbers (21 - 69) during tuning.

Preparation

- Select the video channel or video input mode on the TV.
- Turn on the VTR.
- If you use a satellite receiver, make the connection correctly and turn it on.

INPUT SELECT —

3
2
4
5
6
1, 8

Example to store BBC1 to position number 1 on your VTR.

Allocation of the TV stations into the memory of the VTR is expected to be as follows, for Video Plus+ recording.

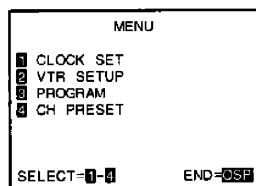|	
BBC1:	Position number 1
BBC2:	Position number 2
ITV:	Position number 3
CHANNEL 4:	Position number 4
Satellite:	Position number 10 (example) (if not connected via SCART)

Important

If the "L1", "L2" or "SA" indicator appears in the VTR display, press the INPUT SELECT button so that the position number appears.
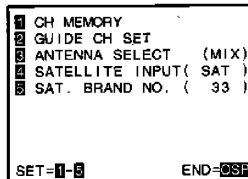
INPUT SELECT   L 1 ⇨ L 2 ⇨ S A ⇨ 4

1 Press the OSP button.

OSP

```
              MENU

      1 CLOCK SET
      2 VTR SETUP
      3 PROGRAM
      4 CH PRESET


      SELECT=1-4        END=OSP
```

2 Press number button 4.

(4)

```
      1 CH MEMORY
      2 GUIDE CH SET
      3 ANTENNA SELECT    (MIX)
      4 SATELLITE INPUT( SAT )
      5 SAT. BRAND NO. (   33 )



      SET=1-5           END=OSP
```

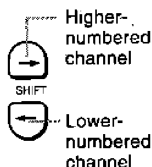**3** Press number button 1 to select "CH MEMORY". The VTR enters the tuning mode.

(1)

VTR display   Example

4 P.   0 2   c h

Position number   TV channel number
                   (any No.of 1 - 9, 21 – 69)

4 Press the CH/TRK button to select position number 1 for this example.

CH/TRK

1 P.   0 2   c h

5 Repeatedly press the SHIFT button until BBC1 is found.
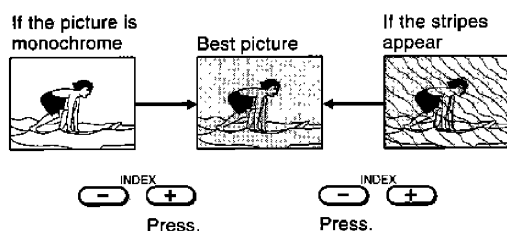
Higher-numbered channel

SHIFT

Lower-numbered channel

1 P.   2 6   c h

- If the received TV station signal is not BBC1, press the SHIFT button again.

6 If a clear picture does not appear on the TV screen after searching is finished, make fine adjustment with the **INDEX** buttons.

If the picture is monochrome | Best picture | If the stripes appear

INDEX ⊖ ⊕   INDEX ⊖ ⊕
Press.   Press.

7 Repeat steps 4 to 6 for other TV stations and your satellite receiver if not connected by a SCART.

BBC2   on position number 2
ITV   on position number 3
CHANNEL 4 on position number 4
Satellite on position number 10

Record all position numbers you stored on the VTR in the chart (GUIDE channel table) below so that you will be ready to use the Video Plus+ recording.

8 Press the **OSP** button.
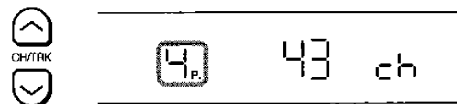Channel tuning is now complete.

OSP ⊂⊃

Once channel tuning is done, you will select the TV station by selecting the position number on which the desired TV station is stored.

Skipping Channels

You can prevent the use of certain channel position numbers when you use the skip function.

1) Set the VTR to the tuning mode following steps 1 to 3 of the channel storing procedure beginning.

2) Select the position number you want to skip with the **CH/TRK** button.

Example: to skip position number 4

3) Press **number button 3**.
The following indication will appear in the VTR display with the skip function on or off.

Channel skip off   Channel skip on

If you press **number button 3** again, the TV channel number will appear and the skip function will be cancelled.

4) Press the **OSP** button.
Channel skipping is now complete.

To cancel channel skipping
Follow steps 1) to 4) above.

GUIDE Channel Table

Stations	GUIDE	Position number in which the TV station has been memorized on the VTR.	Stations	GUIDE	Position number in which the TV station has been memorized on the VTR.
BBC1	001	1	PRO 7	120	
BBC2	002	2	TELE 5	121	
ITV	003	3	TELECLUB	122	
CHANNEL 4	004	4	UK GOLD	123	
RTE (IRELAND)	005		DISCOVERY	124	
NETWORK 2 (IRELAND)	006		BRAVO / ADULT CHANNEL	125	
SKY ONE	101		CNN	126	
SKY NEWS	102		EURONEWS	127	
SKY MOVIES	103		THE LEARNING CHANNEL	128	
THE MOVIE CHANNEL	104		QVC	129	
SKY SPORT	105		UK LIVING	130	
NICKELODEON / NICK AT NIGHT	106		RAI 1	131	
EUROSPORT	107		RAI 2	132	
GALA VISION	108		TV5 EUROPE	133	
MTV EUROPE	109		TVE INTERNATIONAL	134	
CHILDREN'S / FAMILY & CHINESE CHANNEL	110		MBC/ARABIC	135	
SKY MOVIES GOLD	111		VTM	136	
BBC WORLD SERVICE	112		SPORTNET	137	
RTL 4	113		VIDEO HITS ONE	138	
FILMNET +	114		SUPERCHANNEL	144	
RTL PLUS INTERNATIONAL	115		JAPAN TV	145	
SAT 1	116		RTL-5	146	
PREMIERE	117		FILMNET MOVIES	147	
3 SAT	118		T.N.T./CARTOON NETWORK	149	

2

SETTING THE CLOCK

When the VTR is first connected to the AC socket or after a power failure, 0:00 blinks in the VTR display and it is necessary to set the clock.
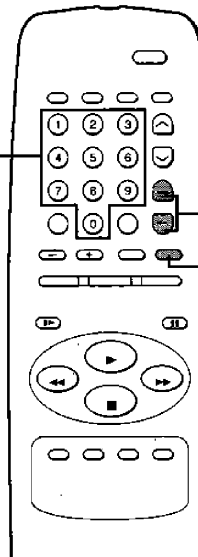

Preparation

* Turn on the VTR.
* Select the video channel or video input mode on the TV.

Information

The item to be set will blink. Set the data with the number buttons, following the blinking position. You can change the blinking position by pressing the SHIFT (→/←) buttons.
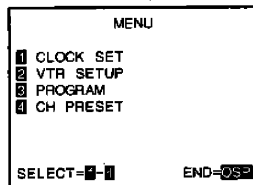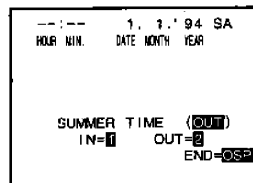
2 - 6

SHIFT

1, 7, 8

Example to set the clock to 15:30 on October 5, 1994.

1 Press the OSP button.

OSP

```
                 MENU

    ▯ CLOCK SET
    ▤ VTR SETUP
    ▥ PROGRAM
    ▦ CH PRESET


    SELECT=▤-▦        END-OSP
```

2 Press number button 1.

①

```
    --:--      1. 1.'94  SA
    HOUR MIN.  DATE MONTH YEAR



    SUMMER TIME    (OUT)
          IN=▯      OUT=▤
                      END=OSP
```
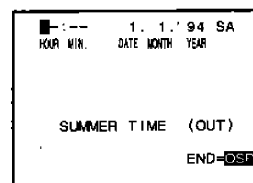
3 To set the clock for summer time (daylight saving), press number button 1; if not set, press number button 2.

①

②

```
    ▮-:--      1. 1.'94  SA
    HOUR MIN.  DATE MONTH YEAR



    SUMMER TIME    (OUT)
                      END=OSP
```

4 Set the hours and minutes. (24 hours clock format)

①→⑤→③→⓪

```
    15:30     ▮1. 1.'94  SA
    HOUR MIN. DATE MONTH YEAR



    SUMMER TIME    (OUT)
                      END=OSP
```
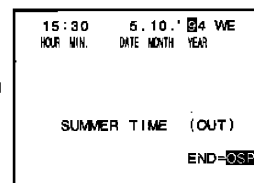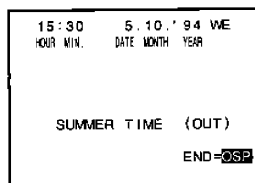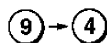

Correcting a mistake

Press the SHIFT (←) button repeatedly until the number you set incorrectly blinks. Press the correct number button and then press the SHIFT (→) button to return to the previous digit.
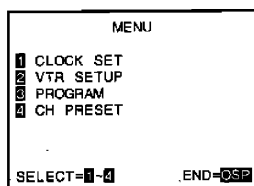
---

5 Set the day and month.

⓪→⑤→①→⓪

```
    15:30     5.10.'▮4  WE
    HOUR MIN. DATE MONTH YEAR



    SUMMER TIME    (OUT)
                      END=OSP
```

6 Set the year.
Press the numbers of the last two figures.

⑨→④

```
15:30      5.10.'94 WE
HOUR MIN.   DATE MONTH YEAR



      SUMMER TIME  (OUT)
                   END=OSP
```

7 Press the OSP button.
Now the clock starts.

OSP

```
               MENU

■ CLOCK SET
■ VTR SETUP
■ PROGRAM
■ CH PRESET


SELECT=■-■      END=OSP
```

15:30

8 Press the OSP button to return to the normal TV screen.

OSP

Notes
• If you input irregular clock data such as February 29, 1994, it will not be accepted.
• The built-in calendar of this VTR is valid from 1990 to 2089.

Resetting the VTR clock

If a power failure of short duration has occurred, the colon between the hour and minutes digits in the VTR display blinks.
The time displayed may be incorrect.

15:30

In this case, you must set the VTR clock again.
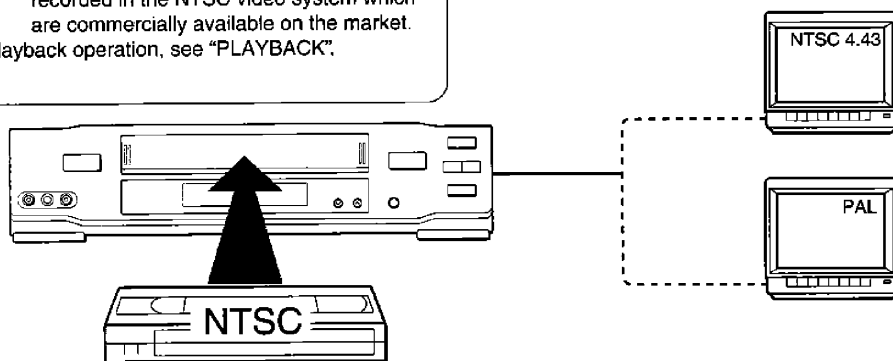Follow the clock setting procedure.

NTSC-RECORDED TAPE PLAYBACK

This VTR can play back an NTSC-recorded tape. You can watch the playback picture on a PAL system TV or an NTSC 4.43 system TV.

Information

NTSC tape: Tapes on which NTSC M system broadcasts mainly transmitted in the U.S. and Japan are recorded, and tapes recorded in the NTSC video system which are commercially available on the market.

For the playback operation, see "PLAYBACK".

NTSC 4.43

PAL

NTSC

If you connect this VTR to a multi system TV (NTSC 4.43 compatible) and play back a NTSC tape
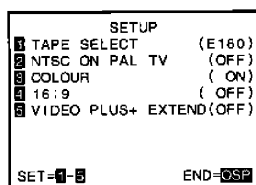
NTSC 4.43

1 Press the **OSP** button.
The MENU screen will appear on the TV.

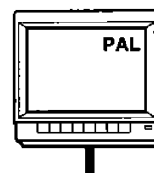OSP

2 Press **number button 2** to select "VTR SETUP".

②

3 Set "NTSC ON PAL TV" to "**OFF**" by pressing **number button 2**.

②

```
            SETUP
1 TAPE  SELECT        (E160)
2 NTSC ON PAL  TV     (OFF)
3 COLOUR              ( ON)
4 16:9                ( OFF)
5 VIDEO PLUS+ EXTEND(OFF)


SET=1~5           END=OSP
```

4 Press the **OSP** button twice to return to the normal TV screen.

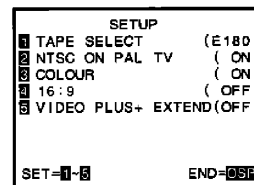**If you connect this VTR to a PAL system TV and play back an NTSC tape**

PAL

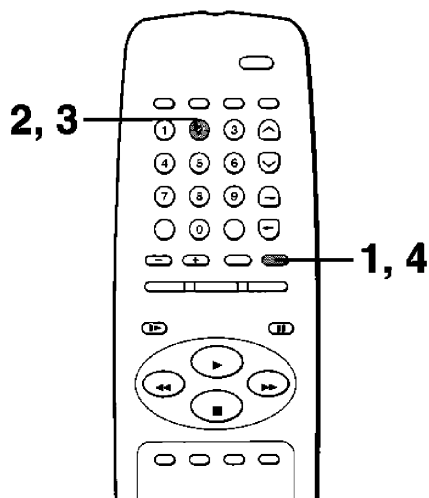**1** Press the **OSP** button.
The MENU screen will appear on the TV.

OSP

2 Press **number button 2** to select "VTR SETUP".

②

3 Set "NTSC ON PAL TV" to "**ON**" by pressing **number button 2**.

②

```
            SETUP
1 TAPE  SELECT        (E180)
2 NTSC ON PAL  TV     ( ON)
3 COLOUR              ( ON)
4 16:9                ( OFF)
5 VIDEO PLUS+ EXTEND(OFF)


SET=1~5           END=OSP
```

4 Press the **OSP** button twice to return to the normal TV screen.

2, 3 ——

1, 4 ——

Notes for Using a PAL TV for NTSC Playback

- Use a TV compatible with PAL video signals of PAL 60 (525 lines).
  When the TV, that is not compatible with PAL video signals of PAL 60, is used (when the TV, that is compatible only with PAL video signals of PAL 50 (625 lines), is used) NTSC playback pictures may roll up and down. This is not malfunction of the VTR or the TV.
  If your TV is equipped with a V-HOLD control, it may be possible to stop the rolling of pictures by adjusting this control.

  About PAL 50 and PAL 60 of PAL video signals:
  PAL 50 : is a normal signal and its PAL video signal is 50 fields (625 lines).
  PAL 60 : is a special signal and its PAL video signal is 60 fields (525 lines).

  Some TVs operate properly only with PAL 50 signals, some TVs operate properly with both PAL 50 and 60 signals.
  Therefore, if your TV is switchable between PAL 50 (625 lines)/PAL 60 (525 lines), you can view an NTSC recorded tape in the PAL colour system with your own TV.

- Depending on the TV used, the picture may shrink vertically and black bars may appear both at the top and bottom of the TV screen.
  This is not an indication of malfunction.
- Variable speed playback (picture search, still, slow playback, etc.) may produce a skewed image and quite a bit of noise on the picture.
- If the tape pre-recorded in the SP tape speed mode is played back in the picture search mode, the picture may be reproduced with no colour.

Note
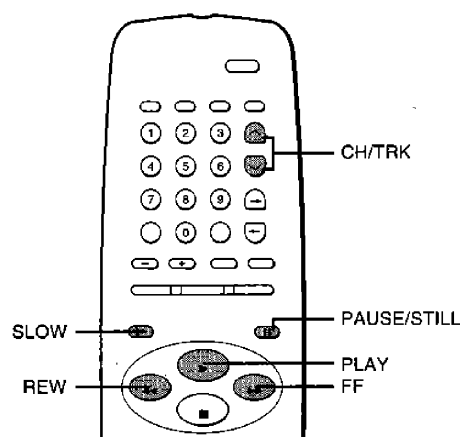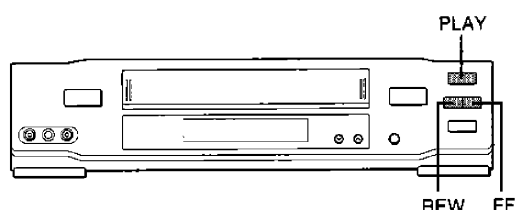For viewing an NTSC-recorded tape, we recommend using an NTSC 4.43 TV.

3 | VARIABLE SPEED PLAYBACK
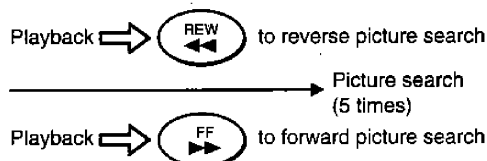
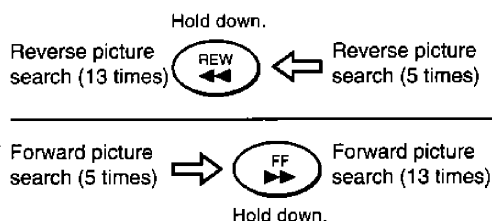You can play back a tape at various tape speeds.

Picture Search

This function allows you to quickly locate a particular scene or segment on the tape while monitoring the playback picture in the fast-forward or rewind mode.

1 During playback, press the REW or FF button.
The tape runs at 5 times the normal playback speed.

Playback ⟹ (REW ◄◄) to reverse picture search

───────────────► Picture search (5 times)

Playback ⟹ (FF ►►) to forward picture search

2 If you hold down the REW or FF button in the picture search mode, the searching speed increases.

Hold down.

Reverse picture search (13 times) (REW ◄◄) ⟸ Reverse picture search (5 times)

Forward picture search (5 times) ⟹ (FF ►►) Forward picture search (13 times)

Hold down.

• When you release the button, the searching speed returns to the 5 times searching speed.

3 To resume normal playback, press the PLAY button.

Notes
• The picture will have some interference. This is not a defect in the unit.
• If you press the REW or FF button while rewinding or fast-forwarding the tape, the VTR enters the picture search mode.
If you press the REW or FF button while picture searching, the VTR enters the rewinding or fast-forwarding mode, respectively.

Still Picture

This function enables you to freeze a picture so that you can watch important scenes closely.

1 During playback, press the PAUSE/STILL button.
The picture freezes.

Playback ⟹ PAUSE/STILL (⏸) to still picture

2 To resume normal playback, press the PAUSE/STILL button.

Still picture ⟹ PAUSE/STILL (⏸) to normal playback

The still picture mode will be released automatically after approximately 5 minutes. The VTR will then shift to the normal playback mode.

Adjusting still picture stability
If the still picture is distorted or flickers, hold down the CH/TRK button until the picture becomes stable.

⌃
CH/TRK
⌄

Notes
• The distortion of the still picture may not be eliminated completely if the tape has been recorded on another VTR.
• The still picture may shake if a picture of a fast-moving object or scene is frozen. This is not a defect in the unit.
• If noise appears in the still picture, adjust the tracking manually in the slow-motion picture mode.

Slow-motion Picture

This function has two variations: 1/6th and 1/12th the normal speed.

1 During playback, press the **SLOW** button.
The tape will run at about 1/6th the normal playback speed.

Playback ⇨ 𝗦𝗟𝗢𝗪 (▶) to 1/6 slow

2 If you press the **SLOW** button again, the tape speed changes to 1/12 slow.

1/6 slow ⇨ 𝗦𝗟𝗢𝗪 (▶) to 1/12 slow

Each time you press the **SLOW** button, the speed changes between 1/6 and 1/12 alternately.

3 To resume normal playback, press the **PLAY** button.

1/6 slow or
1/12 slow ⇨ (PLAY ▶) to normal playback

The slow-motion picture mode will be cancelled automatically after approximately 5 minutes. The VTR will shift to the normal playback mode.

Adjusting the tracking in the slow-motion mode
If the slow-motion picture is noisy, hold down the **CH/TRK** button until the best picture is obtained.

Notes
- The slow-motion picture may flicker up and down. This is not a defect in the unit.
- The noise in the slow-motion picture may not be eliminated completely by the tracking adjustment.

Frame Advance

This function allows you to advance the picture frame by frame.

1 During playback, press the **PAUSE/STILL** button to put the VTR in the still picture mode.

Playback ⇨ PAUSE/STILL (⏸) to still picture

2 Press the **PLAY** button.
The picture advances one frame each time you press the **PLAY** button.

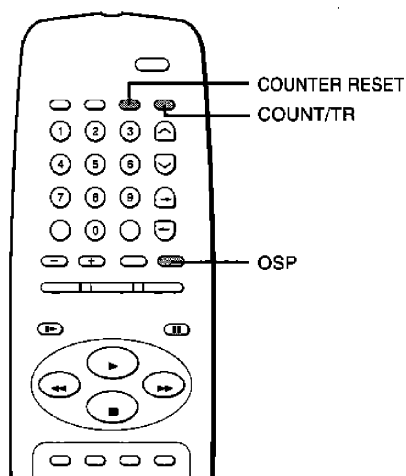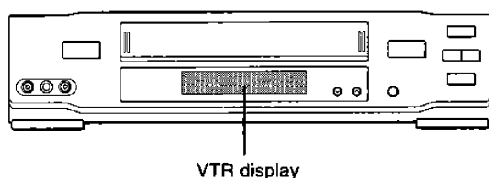Still picture ⇨ (PLAY ▶) to frame advance

When the **PLAY** button is held down, the tape runs at 1/25th the normal playback speed.

3 To resume normal playback, press the **PAUSE/STILL** button.

COUNTER FUNCTION

You can see the clock, linear tape counter or tape time remaining in the VTR display.

COUNTER RESET
COUNT/TR
OSP

VTR display

Changing the Counter Display

Each time you press the **COUNT/TR** button, the display changes in sequence as follows:

	VTR display
Linear time counter	![] minutes hour seconds
Tape time remaining	I. 30. ᵀᴺ
Clock	IS:30
Linear time counter	Linear time counter

To reset the linear time counter to "0H00M00S"
The counter is automatically reset to "0H00M00S" when a cassette is ejected. If you want to reset the counter at some other point, for example, when you start a new recording, just press the **COUNTER RESET** button.

Notes
* The linear time counter does not work on non-recorded portions of the tape.
* When the tape is ejected or the VTR is turned off, the linear time counter changes to clock display.
* If the tape rewinds back over "0H00M00S", "—" appears in the VTR display.
* The displayed time of the linear time counter is approximation.

Tape Time Remaining

1 Turn on the VTR and load a cassette.

2 Press the **OSP** button.
The MENU screen will appear on the TV.

OSP

3 Press **number button 2** to select "VTR SETUP".

```
          SETUP
1 TAPE SELECT      (E180)
2 NTSC ON PAL TV    ( ON)
3 COLOUR            ( ON)
4 16.9             ( OFF)
5 VIDEO PLUS+ EXTEND(OFF)


SET=1-5           END=OSP
```

4 Press **number button 1** and select a tape length, E180, 240, 260 or 300 depending on the tape to be used.
Each time you press **number button 1**, the tape length changes.

E180: when using an E-195 tape or shorter.
E240: when using an E-210 or E-240 tape.
E260: when using an E-260 tape.
E300: when using an E-300 tape.

5 Press the **OSP** button twice to return to the normal TV screen.

6 Press the **COUNT/TR** button.
The tape time remaining is displayed. (See the chart on the left column.)

Notes
* The displayed time remaining is an approximation.
* It is necessary to set the tape length correctly beforehand in step 4 when you use the time remaining display.
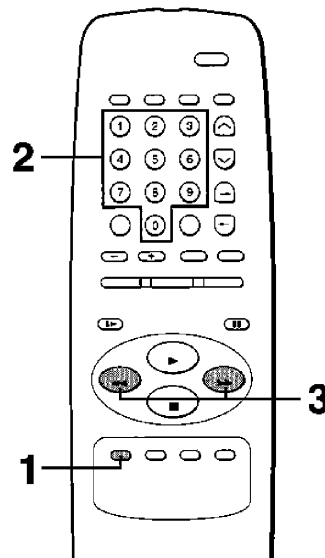
3 TIME SEARCH FUNCTION

The VTR fast-forwards or rewinds the tape by an amount of time you specified.

Preparation

- Turn on the VTR.
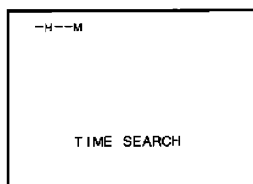- Select the video channel or video input mode on the TV.

2 —

3 —

1 —

Example to move tape ahead 1 hour and 15 minutes

1 Press the **T. SEARCH** button in the stop mode or playback mode.

T.SEARCH

```
-H--M



     TIME  SEARCH
```

2 Within 10 seconds, press **number buttons** to set the hours and minutes.

①→①→⑤

```
1H15M



     TIME  SEARCH
```

To set less than one hour, put 0 for the hours.

3 Press the **FF** or **REW** button within 10 seconds. Time search starts.

FF ►►
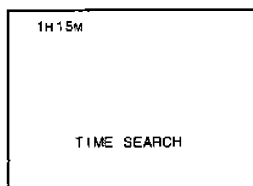
```
1H09M06S



        TIME  SEARCH ►►
```

Notes

- If you make a time search in the playback mode, playback will start after the search is completed.
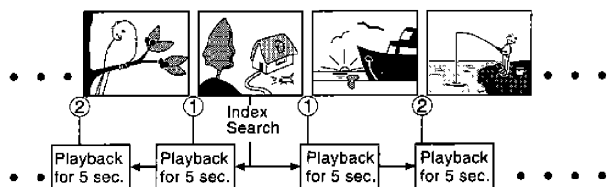- The displayed time is approximation.
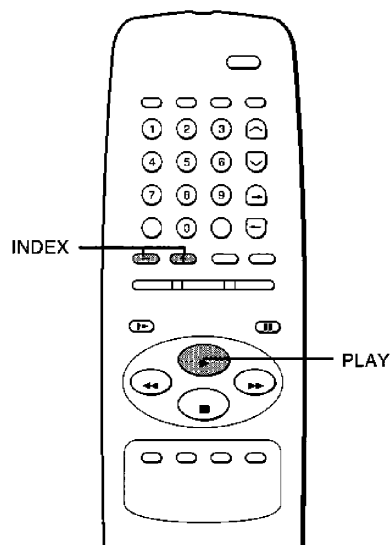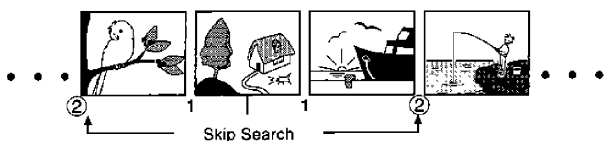
INDEX SEARCH FUNCTION

3

You can easily locate the desired programme using the index signal registered on the tape.

Information

Index Search: Plays back each programme with an index signal for about 5 seconds.

Skip Search: Finds and plays back a programme with an index signal you specified.

INDEX

PLAY

Registering Index Signals Automatically

An index signal is automatically registered **when a recording starts.**
An index signal is also registered when one-touch timer recording or timer programme recording starts.
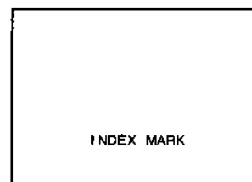
Note
An index signal is not registered automatically when the VTR is in the recording pause mode and recording restarts.

Registering Index Signals Manually

During recording, index signals can be manually registered at desired points on the tape.

Press the **INDEX** (+) button at a desired point.

INDEX

I NDEX MARK

Note
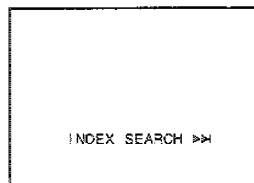When registering two or more index signals, certain intervals are required more than 1 minute.

Index Search

This function plays back the tape for about 5 seconds at each index signal.

1 Load a cassette with the index signals registered.

2 Press the INDEX (–) or (+) button while in the stop or playback mode.

INDEX
(–) : to search in the reverse direction

INDEX
(+) : to search in the forward direction

```
┌─────────────────────────┐
│                         │
│                         │
│                         │
│                         │
│   INDEX SEARCH ▶▶       │
└─────────────────────────┘
```

The VTR fast-forwards or rewinds the tape. When an index signal is found, the VTR plays back the tape for about 5 seconds, and then resumes fast-forwarding or rewinding. This operation is repeated at each index signal.

3 Press the PLAY button when the desired programme is found.
Normal playback starts.

PLAY
▶

Notes
- At the very beginning of the tape, the index search function may not work correctly.
- If you registered the index signals on a tape recorded on another VTR, the recording may be blurred at the index point and the index search may not work correctly.

Skip Search

This function fast-forwards or rewinds the tape to the point at which the selected index signal is registered, and starts playback from there.

1 Load a cassette with the index signals registered.

2 Press the INDEX (–) or (+) button twice in the stop or playback mode.

INDEX
(–) (+)

```
┌─────────────────────────┐
│                         │
│                         │
│                         │
│                         │
│   SKIP SEARCH ▶▶ +01   │
└─────────────────────────┘
```

3 Press the INDEX (–) or (+) button depending on the direction where your desired programme is located. Each time you press the (–) or (+) button, the number decreases or increases respectively.
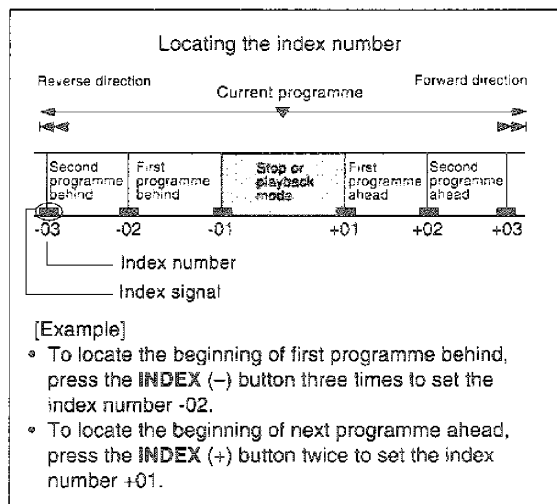
INDEX
(–) (+)

```
┌─────────────────────────┐
│                         │
│                         │
│                         │
│                         │
│   SKIP SEARCH ▶▶ +05   │
└─────────────────────────┘
```

The VTR starts to search for the point you specified with the (–) or (+) button. When the point is found, playback will start automatically.

Notes
- You can set an index number up to ±20.
- The skip search is cancelled when the PLAY or STOP button is pressed.

```
┌──────────────────────────────────────────────┐
│            Locating the index number          │
│                                                │
│ Reverse direction        Current programme    Forward direction │
│  ◀────────────────────────▽─────────────────────▶ │
│  |◀◀                                         ▶▶| │
│  ┌────────┬────────┬────────┬────────┬────────┐ │
│  │Second  │First   │Stop or │First   │Second  │ │
│  │programme│programme│playback│programme│programme│ │
│  │behind  │behind  │mode    │ahead   │ahead   │ │
│  └────────┴────────┴────────┴────────┴────────┘ │
│  -03      -02      -01      +01      +02    +03 │
│       └──── Index number                       │
│       └──── Index signal                       │
└──────────────────────────────────────────────┘
```

[Example]
- To locate the beginning of first programme behind, press the INDEX (–) button three times to set the index number -02.
- To locate the beginning of next programme ahead, press the INDEX (+) button twice to set the index number +01.
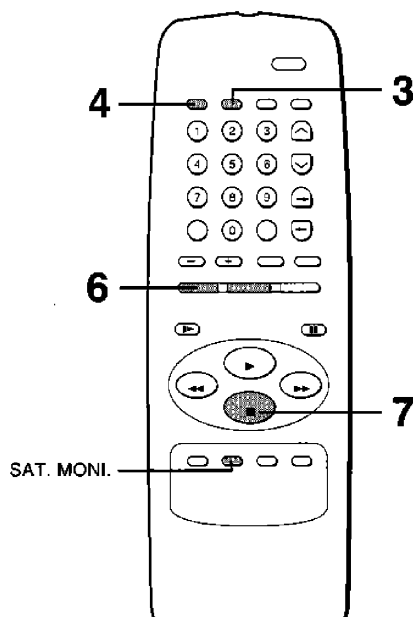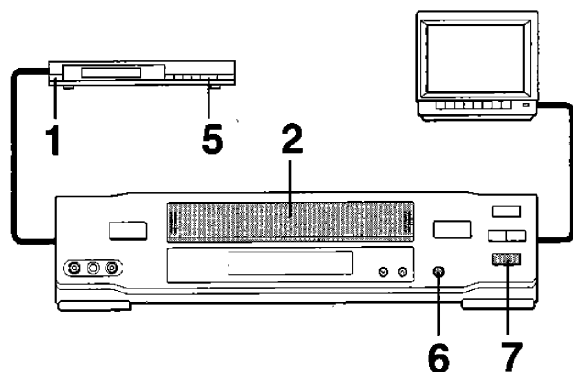
4 RECORDING FROM A SATELLITE RECEIVER

If you are using a satellite receiver, you can connect it to this VTR to record a satellite programme.

Preparation

• Turn on the VTR.
• Select the video channel or video input mode on the TV.
• Make sure your satellite receiver is connected to the VTR correctly.

SAT. MONI.

1 Turn on the connected satellite receiver.

2 Load a cassette with the safety tab attached.

3 Press the TV/VIDEO button so that the "VIDEO" indicator will appear in the VTR display.

TV/VIDEO

4 Press the INPUT SELECT button so that "SA" will appear in the position number area.

INPUT SELECT
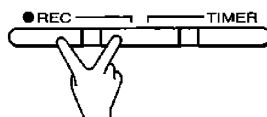
Each time you press the INPUT SELECT button, the display changes as shown below.

→ TV (position number) → L 1→ L 2→ SA (satellite) ┐

5 Choose the satellite programme you want to record using the station selector on the connected satellite receiver.
Make sure that selected programme is on the TV screen.

6 Press the REC button on the VTR, or simultaneously press the two REC buttons on the remote controller. Recording starts.

●REC ┌──┐ ┌──TIMER

7 Press the STOP button when recording is finished.

1-20

Satellite Monitor Function

You can watch a satellite programme from your connected satellite receiver even while the VTR is recording a TV programme, or is in the playback or stop mode.
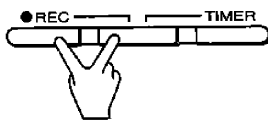
Preparation
Make sure that the satellite receiver, the TV and the antenna are connected properly, using the diagram "CONNECTION TO A SATELLITE RECEIVER".
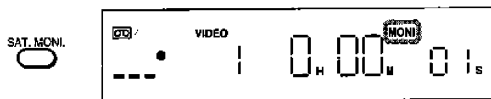
Important
This function only applies when the TV and the satellite receiver are connected to the VTR using the SCART socket.

■ WATCHING A SATELLITE PROGRAMME WHILE RECORDING A TV PROGRAMME

1) Follow steps 1 to 4 of "RECORDING A TV PROGRAMME" and record a TV programme.

2) Press the **SAT. MONI.** button.
   The "MONI" indicator appears.

Each time you press the **SAT. MONI.** button, the "MONI" indicator goes on and off.

3) Choose the satellite programme you want to watch on the connected satellite receiver.

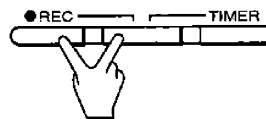### ■ WATCHING A SATELLITE PROGRAMME WHILE THE VTR IS IN THE PLAYBACK OR STOP MODE

1) Press the **SAT. MONI.** button so that the "MONI" indicator will appear in the VTR display.

2) Press the **TV/VIDEO** button so that the "VIDEO" indicator will appear in the VTR display.

3) Choose the satellite programme you want to watch on the connected satellite receiver.
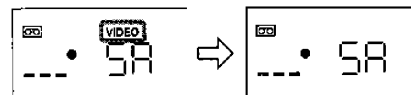
Notes
- When OSP mode (ex. the MENU screen is displayed) is set, the satellite monitor function is cancelled.
- The satellite monitor function is also available in the timer programme recording mode, the timer standby mode, or the one-touch timer recording mode.

■ WATCHING A TV PROGRAMME WHILE RECORDING A SATELLITE PROGRAMME

1) Follow steps 1 to 6 of "RECORDING FROM A SATELLITE RECEIVER", and record a satellite programme.

2) Press the **TV/VIDEO** button so that the "VIDEO" indicator disappears in the VTR display.

3) Choose a TV programme you want to watch on your TV handset while recording a satellite programme.

4 Video Plus+

This VTR is equipped with the Video Plus+ programming system. This system allows you to set up easily for unattended recording.

Information

Before making a Video Plus+ recording, it is necessary to set GUIDE channels to the VTR, except for normal TV stations - no need to do anything.
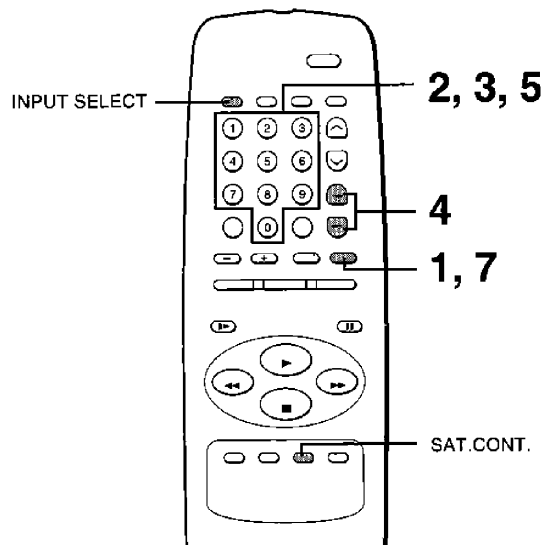
Preparation

• Select the video channel or video input mode on the TV.
• Turn on the VTR.

Note

The recording systems below are also available on this VTR other than the Video Plus+ recording.
• One-touch timer recording
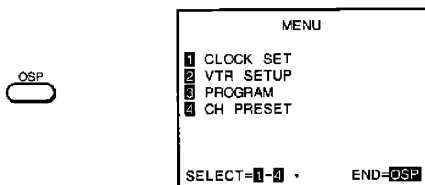• Timer programme recording

INPUT SELECT

2, 3, 5
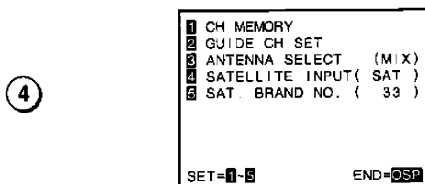
4

1, 7

SAT.CONT.

GUIDE Channel Setting

Important

Make sure that the TV stations have been tuned to the position numbers (1 for BBC1, 2 for BBC2, 3 for ITV and 4 for CHANNEL 4) on the VTR.
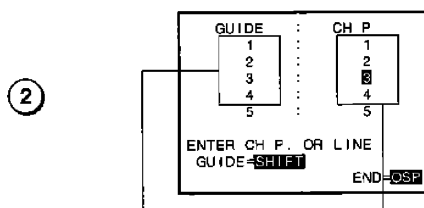
1 Press the OSP button

OSP

```
            MENU

  1  CLOCK  SET
  2  VTR  SETUP
  3  PROGRAM
  4  CH  PRESET



 SELECT=1-4 ·     END=OSP
```

2 Press number button 4.

(4)

```
  1  CH  MEMORY
  2  GUIDE  CH  SET
  3  ANTENNA  SELECT     (MIX)
  4  SATELLITE  INPUT(  SAT  )
  5  SAT  BRAND  NO. (    33  )



 SET=1-5          END=OSP
```

3 Press number button 2.
The GUIDE CH P. screen appears.

(2)

```
  GUIDE    :   CH  P
    1      :     1
    2      :     2
    3      :     3
    4      :     4
    5      :     5

 ENTER  CH  P.  OR  LINE
 GUIDE=SHIFT
                END=OSP
```

Fixed GUIDE channels for TV stations
1: BBC1 2: BBC2
3: ITV   4:CHANNEL 4
No need to change.

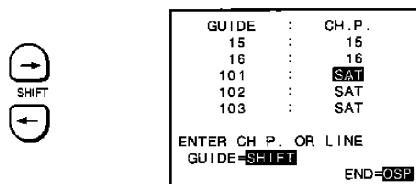Position numbers factory set for the TV stations.
No need to change.

It is not necessary to set the GUIDE channels for BBC1, BBC2, ITV and CHANNEL 4, since they have already set as shown in step 3.
If you want to use Video Plus+ recording for programmes of other stations, eg. Satellite proceed to step 4 on next page.
If not, press the OSP button twice to complete the setting.

4 Press the **SHIFT** button to select the "GUIDE" channel for a desired satellite station.

Example : to set a GUIDE channel 101 for SKY ONE

```
GUIDE    :   CH.P.
  15     :     15
  16     :     16
 101     :    SAT
 102     :    SAT
 103     :    SAT

ENTER CH P. OR LINE
GUIDE=SHIFT
              END=OSP
```

5 Set the "CH P." column.
Use the procedure **A)** or **B)** according to whether the "Satellite Receiver Control" function is available on your satellite receiver or not.

When **available** – your satellite receiver has its brand in the list and can use the satellite receiver control function, use **A)**.
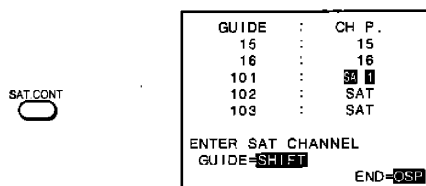
When **not available** – your satellite receiver does not have its brand in the list, use **B)**.

A) Using this setting, the VTR can make a Video Plus+ recording of satellite programmes whilst you are absent, selecting automatically satellite channels as you have set.
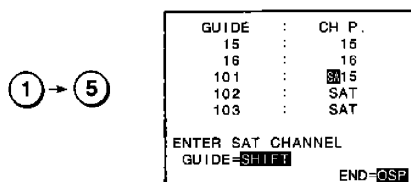
Important
To use this function, make the procedures for the "SATELLITE RECEIVER CONTROL".

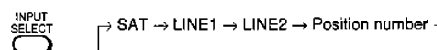1) Press the **SAT. CONT.** button.
   SA appears in the "CH P." column.

```
GUIDE    :   CH  P.
  15     :     15
  16     :     16
 101     :    SA
 102     :    SAT
 103     :    SAT

ENTER SAT CHANNEL
GUIDE=SHIFT
              END=OSP
```

2) Enter a channel of the satellite station using **number buttons**.
   If SKY ONE is channel 15 . . .

```
GUIDE    :   CH  P.
  15     :     15
  16     :     16
 101     :    SA15
 102     :    SAT
 103     :    SAT

ENTER SAT CHANNEL
GUIDE=SHIFT
              END=OSP
```
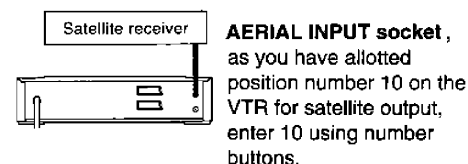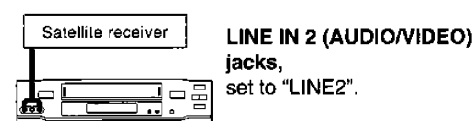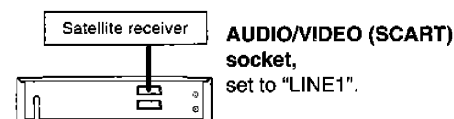
Proceed to step 6.

B) The VTR cannot select automtically satellite channels in the Video Plus+ recording mode. It is necessary to select a desired satellite channel using the station selector on your satellite receiver when you make a Video Plus+ recording.

Set the "CH P." column using the **INPUT SELECT** button according to the connection of your satellite receiver and the VTR.

⌐→ SAT → LINE1 → LINE2 → Position number ⌐

If your satellite receiver is connected via . . .

SATELLITE (SCART) socket, set to "SAT".

AUDIO/VIDEO (SCART) socket, set to "LINE1".

LINE IN 2 (AUDIO/VIDEO) jacks, set to "LINE2".

AERIAL INPUT socket, as you have allotted position number 10 on the VTR for satellite output, enter 10 using number buttons.

6 To set GUIDE channels for other satellite stations, follow steps 4 and 5.

7 Press the **OSP** button three times, to return to normal TV screen.
GUIDE channel setting is all completed.
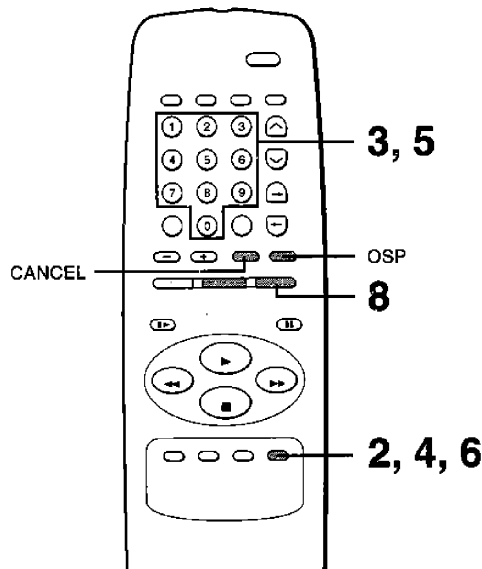
Your Video Plus+ programming is now ready to use.

1-23

4 Video Plus+

After having setting GUIDE channels, you can perform Video Plus+ recording using the PlusCodes.

Preparation

* Make sure that the clock is set correctly.
* If you record from a satellite receiver, make sure that the connection is made correctly.

CANCEL — OSP

3, 5

8

2, 4, 6

Setting Time Extension

Before making a Video Plus+ recording, set possible time extension for the recording to allow for a programme overrunning. You can extend the recording time in 10 minute increments up to 60 minutes.
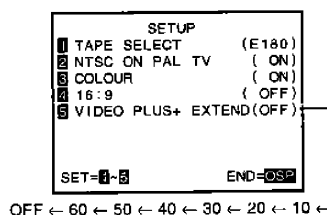
1) Press the **OSP** button.
   The MENU screen appears on the TV.

   OSP

2) Press **number button 2** to select "VTR SETUP".

   ②

3) Press **number button 5** repeatedly to set desired time extension.

   ⑤

   ```
              SETUP
   ■ TAPE SELECT      (E180)
   ■ NTSC ON PAL TV   ( ON )
   ■ COLOUR           ( ON )
   ■ 16 : 9           ( OFF )
   ■ VIDEO PLUS+ EXTEND(OFF)

   SET=■~■           END=OSP
   ```

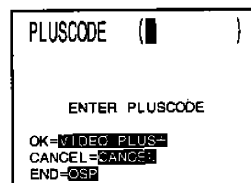   OFF ← 60 ← 50 ← 40 ← 30 ← 20 ← 10 ←

Notes
* Extend time should be set before starting Video Plus+ recording procedure.
  The time extending doesn't work on recording programmes already memorized.
* When you do not use time extension for Video Plus+ recording, set to "OFF" on the SETUP screen.
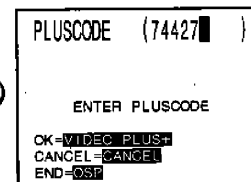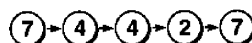

Video Plus+ Recording Procedure

1 Load a cassette with the safety tab attached.

2 Press the **VIDEO PLUS+** button.

   VIDEO PLUS+

   ```
   PLUSCODE  (■        )

         ENTER PLUSCODE

   OK=VIDEO PLUS+
   CANCEL=CANCEL
   END=OSP
   ```

3 Enter the PlusCode.

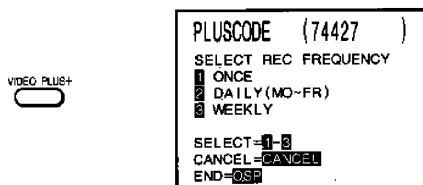   **Example** : to record a TV programme beginning at 20:30 on 8, October, 1994 with PlusCode 74427 (fiction).

   Press **number button 7, 4, 4, 2** and **7**.
   Confirm that the entered number is correct.

   ⑦→④→④→②→⑦

   ```
   PLUSCODE  (74427■     )

         ENTER PLUSCODE

   OK=VIDEO PLUS+
   CANCEL=CANCEL
   END=OSP
   ```

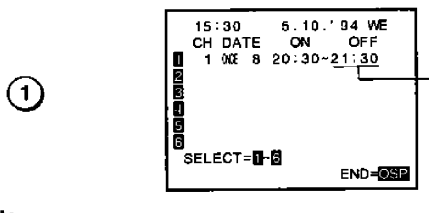
Correcting a mistake:
* Press the CANCEL button. The current PlusCode is cleared.
* Re-enter a correct PlusCode.

1-24

4 Press the **VIDEOPLUS+** button.
The TV screen changes as follows:
(Some TV programmes may not require the selection
on the screen below, and skip automatically to step 6
when its PlusCode is entered.)

VIDEO PLUS+

```
PLUSCODE  (74427    )
SELECT REC FREQUENCY
█ ONCE
█ DAILY(MO~FR)
█ WEEKLY

SELECT=█-█
CANCEL=CANCEL
END=OSP
```

ONCE: one-time recording.
DAILY(MO~FR):   records TV programmes on the same
                TV station at the same time Monday
                through Friday.
WEEKLY: records TV programmes on the same
                TV station at the same time on the
                same day every week.

5 To select "ONCE" for example, press **number
button 1**.
The "ONCE" programming has been made
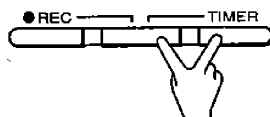automatically.
Programme details are shown.

①

```
15:30    6.10.'04 WE
CH DATE  ON    OFF
█ 1 XX 8 20:30~21:30
█
█
█
█
█
█
 SELECT=█-█
          END=OSP
```

Note
When you set 10 minutes time extension on the SETUP
screen, the "OFF" displays 21:40.

6 Press the **VIDEO PLUS+** button.
Programme setting is now memorized.
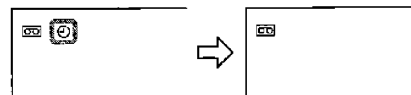
VIDEO PLUS+

7 To enter other PlusCodes, follow steps 2 to 6.

8 Finally press the two **TIMER** buttons simultaneously.
The VTR enters the timer standby mode and ⏰
indicator lights up.

●REC ━━━┐ ┌━━━TIMER

Recording or Playback in the Timer Standby Mode

When you want to use the VTR while it is set to the timer
standby mode, proceed as follows:

1) Press the **TIMER** buttons simultaneously.
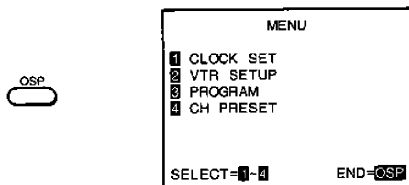⏰ Indicator goes off.

2) Press the **ON/STANDBY** button to turn on the VTR and
operate the VTR as usual.

3) After operating the VTR, press the **TIMER** buttons.
The VTR returns to the timer standby mode.

```
Finish normal use of the VTR before the preset
recording start time, since the timer only works when the
VTR is in the timer standby mode.
```
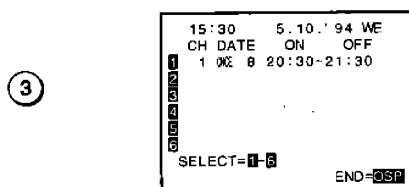
Confirming the Video Plus+ Timer Programmes

■ **To confirm the Video Plus+ recording programme before the VTR enters the timer standby mode (⏲ indicator not lit)**

1) Press the **OSP** button.

```
              MENU

  ■ CLOCK SET
  ■ VTR SETUP
  ■ PROGRAM
  ■ CH PRESET


  SELECT=■-■      END=OSP
```

2) Press **number button 3.**

③

```
  15:30     5.10.' 94 WE
  CH  DATE    ON     OFF
  ■  1 0X 8 20:30-21:30
  ■
  ■
  ■
  ■
   SELECT=■-■
              END=OSP
```
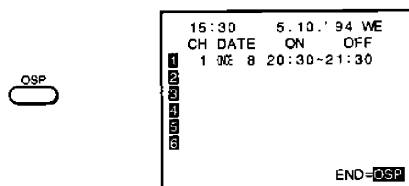
Check your programme data.

3) Press the **OSP** button twice.
   The TV screen returns to the normal screen.

■ **To confirm during the timer programme recording (⏲ indicator lit)**
Press the **OSP** button so that the screen for confirming appears. After about 30 seconds, the screen disappears.
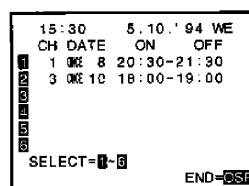
OSP

```
  15:30     5.10.' 94 WE
  CH  DATE    ON     OFF
  ■  1 0X 8 20:30-21:30
  ■
  ■
  ■
  ■
  ■
              END=OSP
```

Cancelling the Video Plus+ Timer Programmes

┌─ **Preparation** ─────────────────┐
If the VTR is set to the timer standby mode, (⏲ indicator lit), press the TIMER buttons to release it and press the ON/STANDBY button.
└──────────────────────────────────┘

1) Press the **OSP** button to display the MENU screen.

2) Press **number button 3.**

③

```
  15:30     5.10.' 94 WE
  CH  DATE    ON     OFF
  ■  1 0X  8 20:30-21:30
  ■  3 0X 10 18:00-19:00
  ■
  ■
  ■
  ■
   SELECT=■-■
              END=OSP
```

3) Select a programme number which you want to cancel by using number buttons.

① · · · ⑥

4) Press the **CANCEL** button.
   The selected programme data is cancelled.

CANCEL

5) Press the **OSP** button.

6) If necessary, i.e. you still have a programme to record, press the **TIMER** buttons to return to the timer standby mode.
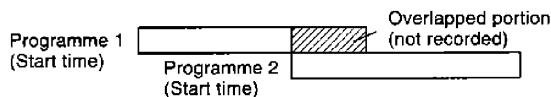
Changing the Video Plus+ Timer Programmes

1) Press the **VIDEO PLUS+** button so that the
   PLUSCODE screen appears.

2) Press the two **TIMER** buttons simultaneously to enter
   the timer standby mode.

Overlaps the programme

If two programmes overlap, the recording start time of
programme 2 has a priority over the recording end time of
programme 1.

Example: when programme 2 overlaps programme 1

Programme 1 (Start time), Programme 2 (Start time), Overlapped portion (not recorded)

Error indicators

When the "FULL (CLEAR PROG?)" message appears on
the TV during programming, no more programmes can be
entered. If you want to add another programme, delete one
existing programme on the screen by using number button.

If impossible PlusCode is entered, "INVALID CODE
ENTERED" blinks on the screen to tell you that the
recording cannot be performed. Press the CANCEL button
to clear the PlusCode number and enter correct one.

If "CLASH" message appears on the screen during
programming, it tells you that two programmes with the
same recording start time have been entered. You have to
make a correction. On this screen, blinking item number
means that the item has been entered later.

1) Press **a number button** corresponding to the item to
   be cancelled. The selected item has been cleared.

2) Press the **VIDEO PLUS+** button.

   ├─ If the PLUSCODE screen appears:
   │   Confirm the programme on the screen and
   │   press the **VIDEO PLUS+** button.
   │   The programme is memorized and the normal
   │   screen appears.
   └─ If the normal screen appears:
        It means that your programme has been already
        memorized. No need to make a further setting.
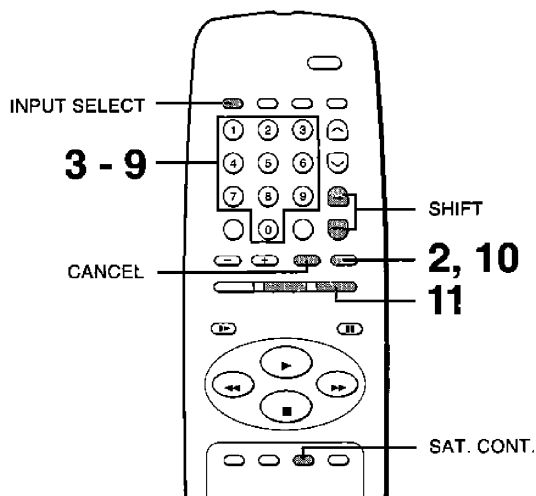
TIMER PROGRAMME RECORDING

The programmable timer allows you to record up to 6 different programmes over one month. This function is convenient when you are away from home or when you are busy.

Information

The item to be set blinks. Set the data with the number buttons, following the blinking position.
You can change the blinking position by pressing the SHIFT (→/←) buttons.

Preparation

- Turn on the VTR.
- Select the video channel or video input mode on the TV.
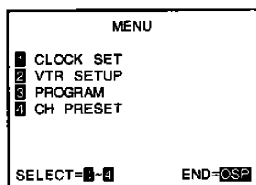- Make sure that the clock is set correctly.

INPUT SELECT

3 - 9

CANCEL

SHIFT

2, 10

11

SAT. CONT.

Example

to record a programme of a station stored on position number 1 (eg. BBC1) from 20:30 until 21:30 on October 8. Today is October 5.
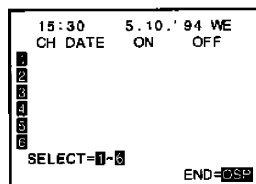
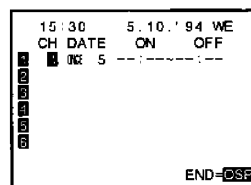**1** Load a cassette with the safety tab attached.
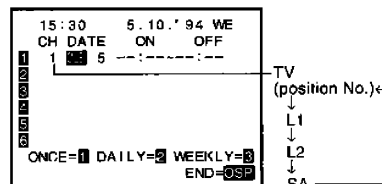
2 Press the OSP button.

```
           MENU
 1 CLOCK SET
 2 VTR SETUP
 3 PROGRAM
 4 CH PRESET


 SELECT=1-4        END=OSP
```

3 Press number button 3.

```
 15:30      5.10.' 94 WE
 CH DATE    ON     OFF
 1
 2
 3
 4
 5
 6
 SELECT=1-6
               END=OSP
```

4 Select programme number 1.

```
 15:30      5.10.' 94 WE
 CH DATE    ON     OFF
 1  0  5  --:-- --:--
 2
 3
 4
 5
 6

               END=OSP
```

5 Select position number 1.
Press **number button 0 and 1**.

```
 15:30      5.10.' 94 WE
 CH DATE    ON     OFF          TV
 1  1  5  --:-- --:--          (position No.)
 2                              L1
 3
 4                              L2
 5
 6
 ONCE=1 DAILY=2 WEEKLY=3
               END=OSP          SA
```
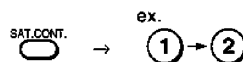
You can make a timer programme recording of a source programme from other equipment connected to this VTR using the **INPUT SELECT** button.

- **L1** : to record from other equipment connected to the AUDIO/VIDEO (SCART) socket on the rear panel of this VTR.
- **L2** : to record from other equipment connected to the LINE IN 2 jacks on the front panel of this VTR.
- **SA** : to record from the satellite receiver connected to the SATELLITE (SCART) socket on the rear panel of this VTR.

If you press the **SAT. CONT.** button, the VTR enters the satellite receiver control mode and "SA" is displayed. Enter a desired satellite station.

ex.
SAT.CONT. → 1→2

1-28

Correcting a mistake
Press the SHIFT (←) button to reverse the blinking position until the number you set incorrectly blinks. Correct the number with the number buttons and press the SHIFT (→) button to return the blinking digit.

6 Select a one-time recording.
You can also set daily and weekly timer recordings.

(1)

```
15:30      5.10.'94 WE
CH DATE   ON    OFF
1  1 OCT 05  --:-----:--
2
3
4
5
6
                    END=OSP
```

7 Set the recording date.

(0) → (8)

```
15:30      5.10.'94 WE
CH DATE   ON    OFF
1  1 OCT 8  -:-----:--
2
3
4
5
6
                    END=OSP
```

8 Set the hours and minutes of the recording start time.

(2) → (0) → (3) → (0)

```
15:30      5.10.'94 WE
CH DATE   ON    OFF
1  1 OCT 8 20:30-:--
2
3
4
5
6
                    END=OSP
```

9 Set the hours and minutes of recording end time.

(2) → (1) → (3) → (0)

```
15:30      5.10.'94 WE
CH DATE   ON    OFF
1  1 OCT 8 20:30~21:30
2
3
4
5
6
SELECT=1-6
                    END=OSP
```
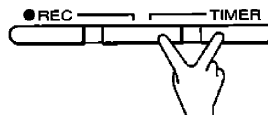
To set another programme, follow steps 4 to 9. (For this example, since programme number 1 is already used, set another programme using programme numbers 2, 3 . . 6 in step 4.)

10 Press the **OSP** button.
Programme setting is completed.

OSP

```
            MENU
1  CLOCK SET
2  VTR SETUP
3  PROGRAM
4  CH PRESET

SELECT=1~4         END=OSP
```
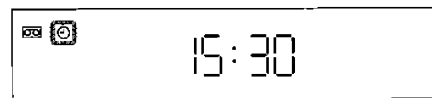
11 Press the two **TIMER** buttons simultaneously.

●REC ———┐ ┌——— TIMER

The power will be turned off and the VTR enters the timer standby mode.

```
    15:30
```

Daily and Weekly Recording

■ Daily timer programme recording

You can record TV programmes on the same TV station at the same hour Monday through Friday.

1) In step 6, press **number button 2** to select "DAILY".

(2)

```
15:30      5.10.' 94 WE
CH DATE    ON      OFF
1  1 MO~FR■:----:--
2
3
4
5
6
                    END=OSP
```

2) Skip step 7.

3) Perform steps 8 to 11.

■ Weekly timer programme recording

You can record TV programmes on the same TV station on the same day every week.

1) In step 6, press **number button 3** to select "WEEKLY".

(3)

```
15:30      5.10.' 94 WE
CH DATE    ON      OFF
1  1 WLYWE --:----:--
2
3
4
5
6
SU=1  MO=2  TU=3  WE=4  TH=5
FR=6  SA=7              END=OSP
```

2) Press **number button 1 to 7** to select the day of the week.
For example, if you press **number button 2** to select "MO", you can record the programme on the same TV station on the same time every Monday.

(2)

```
15:30      5.10.' 94 WE
CH DATE    ON      OFF
1  1 WLYMO ■:----:--
2
3
4
5
6
                    END=OSP
```

3) Skip step 7.

4) Perform steps 8 to 11.

Confirming the Timer Programmes

To confirm during the timer programme recording (☉ indicator lit)

Press the **OSP** button so that the screen for confirming appears. After about 30 seconds, the screen disappears.

OSP

```
15:30      5.10.' 94 WE
CH DATE    ON      OFF
1  1 MX  8 20:30-21:30
2
3
4
5
6
                    END=OSP
```

Changing the Timer Programme

> **Preparation**
>
> If the VTR is set to the timer standby mode (☉ indicator lit), press the TIMER buttons to release it and press the ON/STANDBY button.

1) Perform step 2 to 11 of the timer programme setting procedure, to correct timer programme data.

   • In step 4, select a programme number which you want to correct.

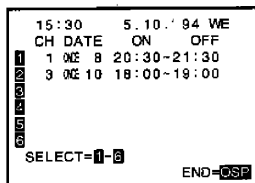2) Press the **TIMER** buttons simultaneously to return the VTR to the timer standby mode.

Cancelling the Timer Programmes

1) Press the **OSP** button to display the MENU screen.

2) Press **number button 3**.

③

```
  15:30      5.10.'94 WE
  CH DATE    ON    OFF
1  1 OCE 8 20:30-21:30
2  3 OCE 10 18:00~19:00
3
4
5
6
  SELECT=1-6
              END-OSP
```

3) Select a programme number which you want to cancel by using number buttons.

① ··· ⑥

4) Press the **CANCEL** button.
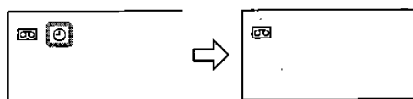   The selected programme data is cancelled.

CANCEL

5) Press the **OSP** button.

6) If necessary, press the **TIMER** buttons to return to the timer standby mode.

Recording or Playback in the Timer Standby Mode

When you want to use the VTR while it is set to the timer standby mode, proceed as follows:

1) Press the **TIMER** buttons simultaneously.
   ☉ indicator goes off.

2) Press the **ON/STANDBY** button to turn on the VTR and operate the VTR as usual.

3) After operating the VTR, press the **TIMER** buttons.
   The VTR returns to the timer standby mode.

Finish normal use of the VTR before the preset recording start time, since the timer only works when the VTR is in the timer standby mode.

Additional Information

Error Indicator
The "E" (error) indicator appears in the VTR display if you press the TIMER buttons when:
— a cassette is not loaded.
— a cassette without a safety tab is loaded.
— a cassette with a safety tab is loaded and no timer programmes are set on the VTR.
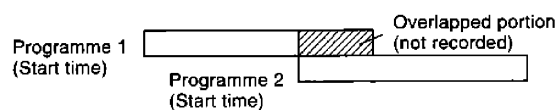In these cases, a recording will not be made.

If a power failure occurs during timer programme recording
- After a power failure of short duration, the colon between the hour and minute digits blinks in the VTR display. This indicates that the timer programmes are still in the memory of the VTR.
- After a power failure of long duration, 0:00 blinks in the VTR display. This indicates that the timer programmes have been cleared. Reset the clock and timer programmes on the VTR.

Overlap of the programmes
If two timer programmes overlap, the recording start time of programme 2 has priority over the recording end time of programme 1.

Example : when programme 2 overlaps programme 1

Programme 1
(Start time)   Overlapped portion (not recorded)

Programme 2
(Start time)

4 SATELLITE RECEIVER CONTROL

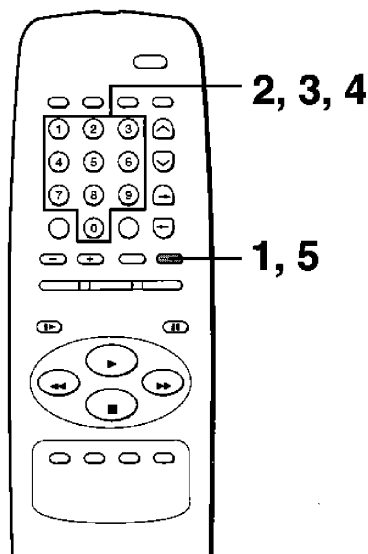The VTR can directly control station selecting of the connected satellite receiver.

Information

The following settings are required to control your satellite receiver by this VTR.
1) Placing the Satellite Receiver
2) Setting the Satellite Receiver Brand Code
3) Setting the Satellite Receiver Control

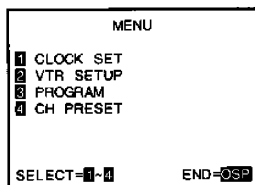**Important**

- First perform "Placing the Satellite Receiver".
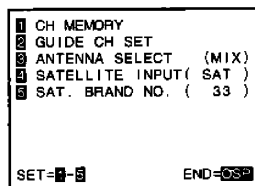- Keep the connected satellite receiver turned on.

2, 3, 4

1, 5

Setting the Satellite Receiver Brand Code

1 Press the OSP button.

OSP

```
              MENU

   ■ CLOCK SET
   ■ VTR SETUP
   ■ PROGRAM
   ■ CH PRESET


   SELECT=■~■        END=OSP
```

2 Press number button 4.

④

```
   ■ CH MEMORY
   ■ GUIDE CH SET
   ■ ANTENNA SELECT    (MIX)
   ■ SATELLITE INPUT( SAT )
   ■ SAT. BRAND NO. (   33 )



   SET=■-■            END=OSP
```

3 Press number button 5.

⑤

```
   SAT. BRAND NO. ( ■■■ )

   ENTER SAT. BRAND NO.
                       END=OSP
```

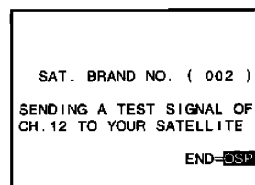**4** Press **number buttons** to enter three figures of the brand code for your satellite receiver.

Example: to enter brand code 2.

⓪→⓪→②

```
   SAT. BRAND NO. ( 002 )

   SENDING A TEST SIGNAL OF
   CH.12 TO YOUR SATELLITE

                       END=OSP
```

When you enter the brand code, the VTR sends a test signal to the satellite receiver to make sure that the brand code has been entered correctly. The signal will set the satellite channel to 12. Accordingly, if channel 12 is displayed on your satellite receiver, it means the brand code is set correctly.
Several codes may be allocated to one brand. Enter one after the other so that the channel shows 12.

5 After having confirmed that the channel of the satellite receiver is 12, press the OSP button three times to return to the normal TV screen.

Table of Satellite Brand Code

Brand name	Brand code
TOSHIBA	33
ALBA	1, 2, 9, 16, 65, 66
ALDES	88
ALLSAT	9, 16, 23
AMSTRAD	3, 4, 5, 55, 56, 76, 77, 89, 90, 91
ARMSTRONG	43
BEST/DISKEXPRESS	26
BIG BROTHER	7, 8
BUSH	2, 9, 16, 65, 66
CABLE STAR	101, 102, 103, 104
CABLETIME	101, 102, 103, 104
CHANNEL MASTER	2, 3, 10
D2MAC DECODER	72
DECSAT/C+ SAT.	72
DRAKE	45
ECHOSTAR	13, 14, 92, 93, 94
FERGUSON	9, 15, 16, 17, 23, 38, 39, 59, 108
FUBA	49, 69, 70, 78, 96
GI	105, 106, 107, 108, 110
GRUNDIG	17, 19, 28, 71
HIRSCHMANN	11, 19, 47, 48
HUTH	74
IMPULSE	105, 106, 107, 108, 110
ITT/NOKIA	17, 26, 27, 50, 51, 52
JERROLD	105, 106, 107, 108, 110
KATHREIN	12, 16, 20, 24, 29, 31, 46, 73, 97
LENCO	49
MACOM	111
MASPRO	17, 20, 64, 67
MIMTEC	21
MORGAN	43

Brand name	Brand code
NAGAI PALSAT	95, 96
NEC	22, 57
NETWORK	9, 16
NORDMENDE	17
OAK	112, 113, 114, 115
PACE	9, 16, 17, 23, 38
PANASONIC	17, 61
PHILIPS	16, 24, 46, 73
REDIFFUSION	25
REVOX	21
SAKURA	62, 63, 68
SALORA	17, 26, 27, 50, 51, 52
SAMSUNG	36
SCHWAIGER	23, 43
SCIENTIFIC ATLANTA	116, 117, 118
SEEMANNS	23
SENTRA	10
SONY	30
STRONG	31
TATUNG/NIKKO	32, 54, 58, 80, 81
TECHNISAT	40, 41, 92, 93
TELEDIREKT	23
TEXSCAN	119, 120
THOMSON	7, 17, 39
TRISTAR	31
UNIDEN	67
VIDEOTRON	105, 106, 107, 108, 109, 110, 121
VIDEOWAY	105, 106, 107, 108, 109, 110, 121
VISIOPASS	16, 24, 46, 73
VORTEC	36
WISI	35, 37, 44, 93

- For some brands, several brand codes are allocated.
- Some satellite recievers may not be operated at all with this VTR.
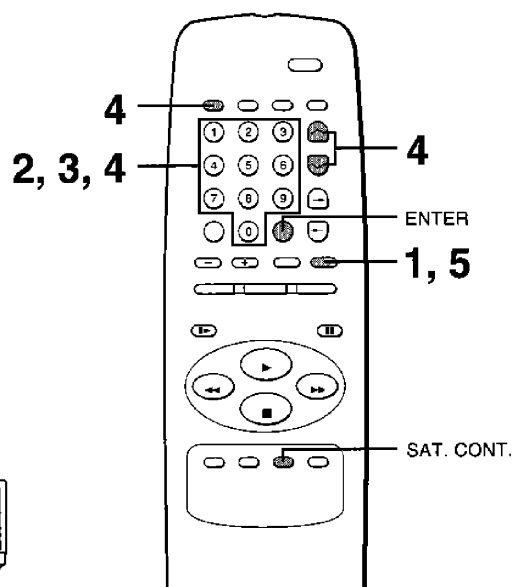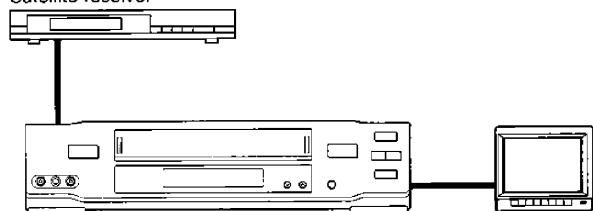
4 SATELLITE RECEIVER CONTROL

Important

- Perform "Setting the Satellite Receiver Brand Code" beforehand.
- Keep the connected satellite receiver turned on.

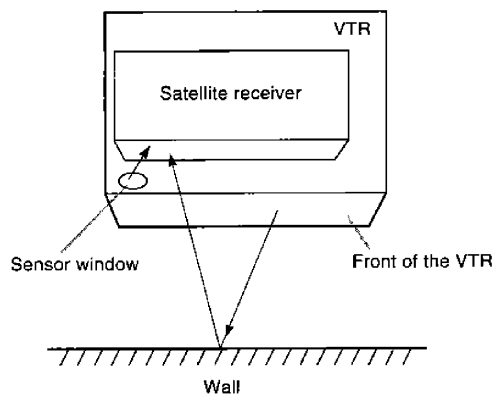Satellite receiver

4

2, 3, 4

4

ENTER

1, 5

SAT. CONT.

Placing the Satellite Receiver

Put the satellite receiver on the top of the VTR as shown below.
Do not block the sensor window.

VTR

Satellite receiver

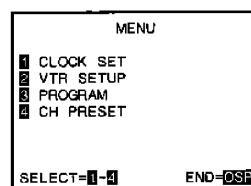Sensor window   Front of the VTR

Wall

The infrared signals come out of the sensor window and the front of the VTR, and they bounce off walls and objects in the room and are received by the satellite receiver.
The VTR sends out infrared control signals to your satellite receiver even during timer programme recording.
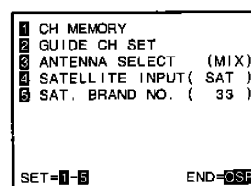
Note
If the satellite receiver cannot be controlled properly because the infrared signals fail to reach it, change the position on the VTR so that it can receive the signals enough.

Setting the Satellite Receiver Control

1 Press the **OSP** button.

OSP

```
              MENU

 1 CLOCK SET
 2 VTR SETUP
 3 PROGRAM
 4 CH PRESET


 SELECT=1-4        END=OSP
```

2 Press **number button 4**.

④

```
 1 CH MEMORY
 2 GUIDE CH SET
 3 ANTENNA SELECT    (MIX)
 4 SATELLITE INPUT( SAT )
 5 SAT. BRAND NO. (  33 )


 SET=1-5           END=OSP
```

3 Press **number button 4**.

④

```
 SATELLITE INPUT( SAT )

 ENTER CH P. OR LINE

                   END=OSP
```

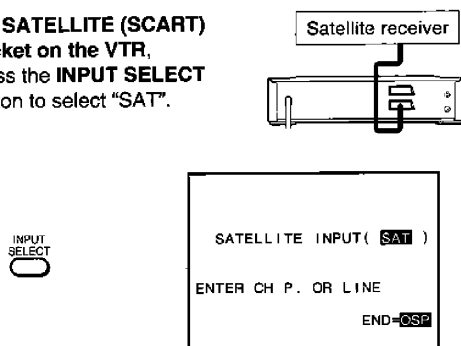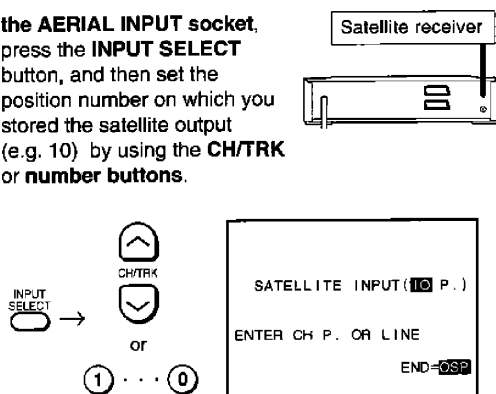**4** Set the position number or line input mode depending on your satellite receiver connection.
If your satellite receiver is connected via . . .

the SATELLITE (SCART) socket on the VTR, press the **INPUT SELECT** button to select "SAT".

Satellite receiver

INPUT SELECT

```
SATELLITE INPUT( SAT )

ENTER CH P. OR LINE
                        END=OSP
```

the AERIAL INPUT socket, press the **INPUT SELECT** button, and then set the position number on which you stored the satellite output (e.g. 10) by using the **CH/TRK** or **number buttons.**

Satellite receiver

INPUT SELECT → CH/TRK

or

(1) · · · (0)

```
SATELLITE INPUT( 10 P. )

ENTER CH P. OR LINE
                        END=OSP
```

5 Press the **OSP** button three times to return to the normal TV screen.
The satellite receiver control function is ready to use.

Using the Satellite Receiver Control

■ **SELECTING SATELLITE CHANNELS WITH THE REMOTE CONTROLLER OF THE VTR**

1) Press the **SAT. CONT.** button to make "SAT", "SA" appear in the VTR display.

SAT.CONT.

2) Select a desired satellite channel using **number buttons.**

Ways of use may differ. Check how they work on your satellite receiver.

Ex. to select satellite channel 3.

- Press **number button 0 and 3.** (0)→(3)

- Press **number button 0, 3 and the ENTER button.** (0)→(3)→(✓/–) ENTER

- Press the **ENTER button and number button 3.** (✓/–)→(3) ENTER

Ex. to select satellite channel 16.

- Press **number button 1 and 6.** (1)→(6)

- Press **number button 1, 6 and the ENTER button.** (1)→(6)→(✓/–) ENTER

- Press the **ENTER button twice and number button 1, 6.** (✓/–)→(✓/–)→(1)→(6) ENTER ENTER

█Important
Some satellite receivers may not respond to all of the operations above, or may not be operated at all with this remote controller. In such a case, operate the satellite receiver with its own remote controller.

Notes
- Each time the SAT. CONT. button is pressed, this function goes on or off.
- To make a position number appear in the VTR display after you have cancelled this function, press the INPUT SELECT button.

■ **CHANGING SATELLITE CHANNELS AUTOMATICALLY IN THE TIMER PROGRAMME RECORDING MODE**

See "TIMER PROGRAMME RECORDING".

Note
Keep the satellite receiver turned on even while the VTR is in the timer programme recording mode.
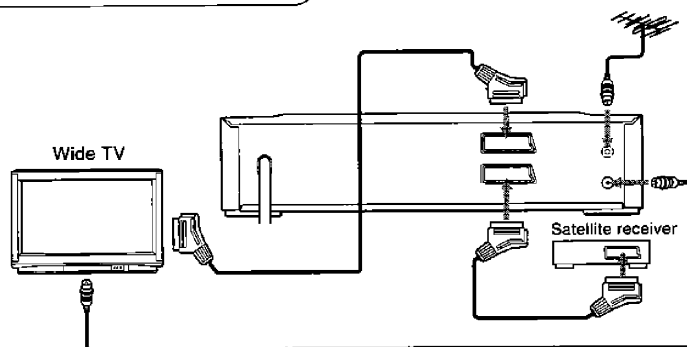
4 | 16:9 (WIDE SCREEN) COMPATIBILITY

The VTR automatically adjusts the image to fill the wide TV screen when recording or playing back a wide TV programme via the connected satellite receiver, etc.
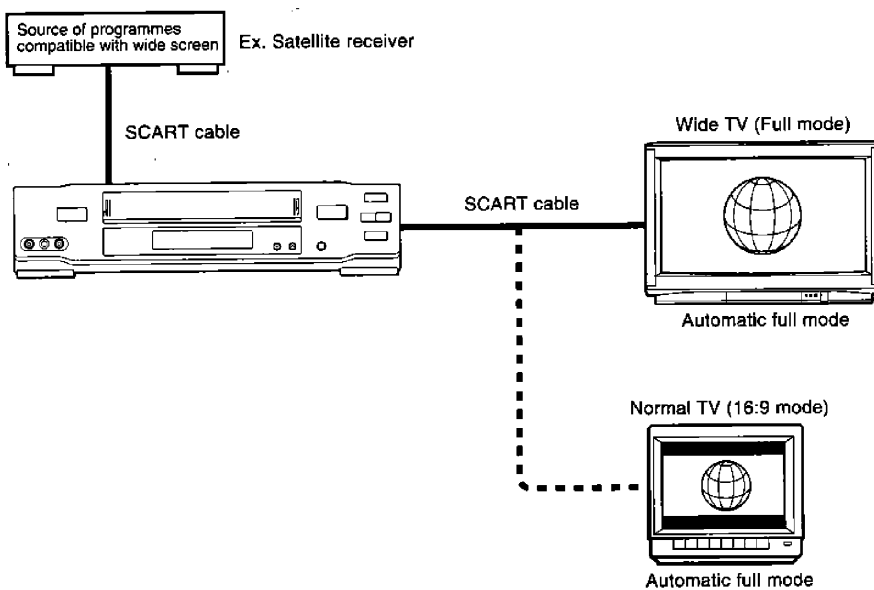
Information

When you play back a tape commercially available which is recorded in the wide screen format, or when you record or play back a wide TV programme via the connected satellite receiver, etc., the VTR automatically adjusts the image to fill the wide TV screen.
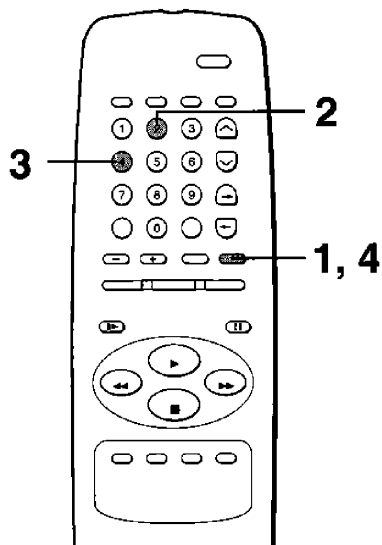
Important

Connect equipment compatible with wide screen, to the VTR using the SCART cable.

Wide TV

Satellite receiver

Wide TV and normal TV on this function

Source of programmes compatible with wide screen | Ex. Satellite receiver

SCART cable

SCART cable

Wide TV (Full mode)

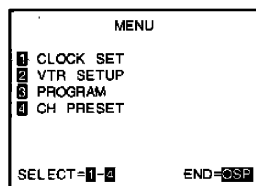Automatic full mode

Normal TV (16:9 mode)

Automatic full mode

Setting of 16:9 Wide Screen

Make the setting when you record or play back a wide TV programme.

1 Press the OSP button.

```
            MENU

 [1] CLOCK SET
 [2] VTR SETUP
 [3] PROGRAM
 [4] CH PRESET


 SELECT=[1]-[4]      END=[OSP]
```
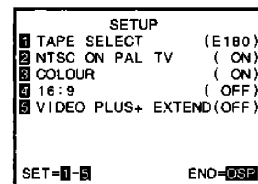
2 Press **number button 2**.

②

```
            SETUP

 [1] TAPE SELECT        (E180)
 [2] NTSC ON PAL TV     ( ON)
 [3] COLOUR             ( ON)
 [4] 16:9               ( OFF)
 [5] VIDEO PLUS+ EXTEND(OFF)


 SET=[1]-[5]        END=[OSP]
```

3 Press **number button 4** to set "16:9".

④

```
            SETUP

 [1] TAPE SELECT        (E180)
 [2] NTSC ON PAL TV     ( ON)
 [3] COLOUR             ( ON)
 [4] 16:9               ( OFF)
 [5] VIDEO PLUS+ EXTEND(OFF)


 SET=[1]-[5]        END=[OSP]
```

OFF: Set if you do not use a wide TV.

AUTO: Set when you use a wide TV. The VTR automatically detects wide TV programmes and normal TV programmes.

ON: The VTR is set usually in the mode compatible with 16:9 wide screen. Set if the VTR cannot detect wide TV programmes with "AUTO" set.

4 Press the OSP button twice to return to the normal TV screen.

Instructions for Installing the Optical Infrared Transmitter

The satellite receiver can be controlled through the use of the Optical Infrared Transmitter (Part number: 70148859).
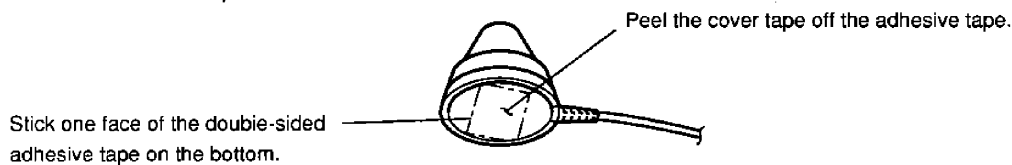
■ Installation and Position Setting

When setting up the brand of the satellite receiver, place the transmitter in such a position that the channel display of the satellite receiver will be changed to 12.
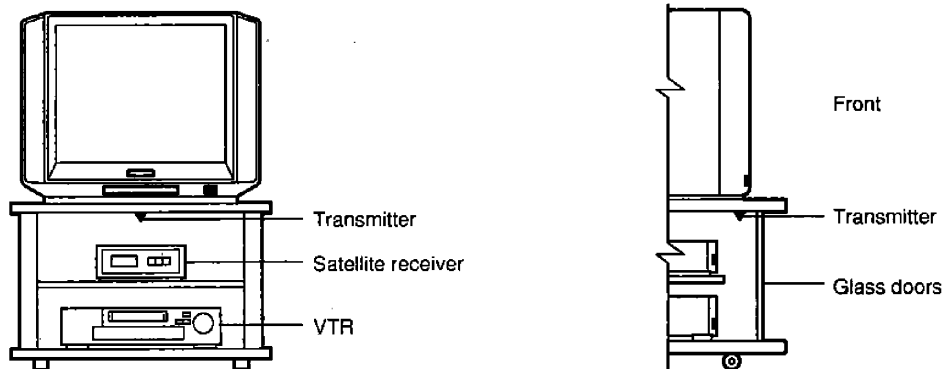* Select a position where the transmitter is near the remote control sensor of the piece of that needs to be controlled.
* Be careful that the transmitter and its cord do not touch any doors when they are opened and closed.

AD Fixing Method

1. Stick one face of the double-sided adhesive tape on the bottom of the transmitter.
2. After checking the proper operation of the satellite receiver, peel the cover off the adhesive tape attached to the transmitter and place the transmitter in position.
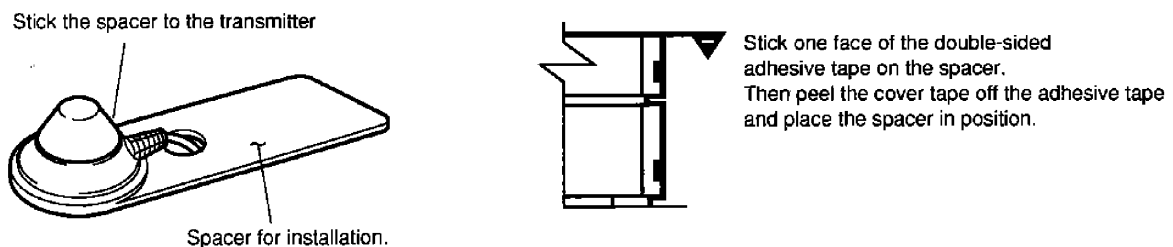
Peel the cover tape off the adhesive tape.

Stick one face of the doubie-sided adhesive tape on the bottom.

Example of Installation

Transmitter

Satellite receiver

VTR

Front

Transmitter

Glass doors

If a rack or TV table are not available or if there is not enough space for installation, use the supplied spacer for installing the transmitter.

Example of Installation

Stick the spacer to the transmitter

Spacer for installation.

Stick one face of the double-sided adhesive tape on the spacer.
Then peel the cover tape off the adhesive tape and place the spacer in position.

Notes:

* Set the transmitter installation position so that the distance from the remote control sensor falls within 50 cm. (21 inches)
* Make sure that the remote control sensor of the satellite receiver operates properly if the transmitter is moved slightly.